AV RECEIVER

RX-V795a/RDS
HTR-5170

SERVICE MANUAL

IMPORTANT NOTICE

This manual has been provided for the use of authorized YAMAHA Retailers and their service personnel.
It has been assumed that basic service procedures inherent to the industry, and more specifically YAMAHA Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all YAMAHA product owners that any service required should be performed by an authorized YAMAHA Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of YAMAHA are continually striving to improve YAMAHA products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and part replacement. Recheck all work before you apply power to the unit.

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100691

YAMAHA

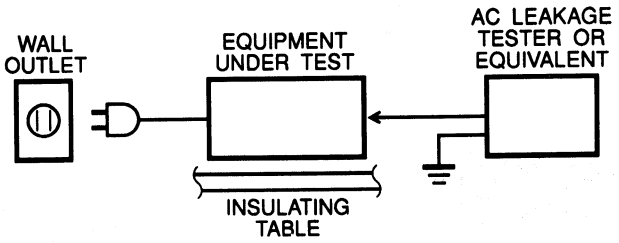
YAMAHA CORPORATION
P.O.Box1,Hamamatsu,Japan
Printed in Japan

RX-V795a/RDS
HTR-5170

■ TO SERVICE PERSONNEL

1. Critical Components information.
   Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.
2. Leakage Current Measurement (For 120V Model only).
   When service has been completed, it is imperative that you verify that all exposed conductive surfaces are properly insulated from supply circuits.

- Meter impedance should be equivalent to 1500 ohm shunted by 0.15 µF.
- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.



"CAUTION"

"F821 : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,REPLACE ONLY WITH SAME TYPE 2.5A,250V FUSE (G model)"
"F822 : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,REPLACE ONLY WITH SAME TYPE 4.0A,250V FUSE (A, B, G, L models)"
"F823 : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,REPLACE ONLY WITH SAME TYPE 8.0A,125V FUSE (U, C, R, T models)"
"F851 : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,REPLACE ONLY WITH SAME TYPE 4.0A,250V FUSE (R, T models)"

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (Where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

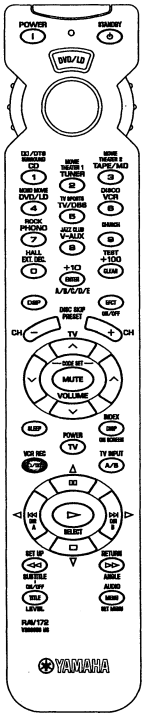
DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

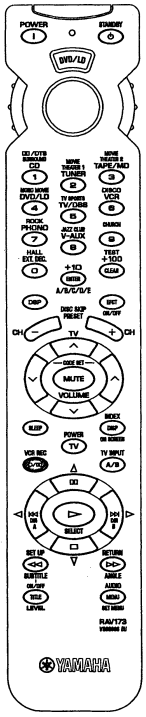
If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

■ REMOTE CONTROL PANELS

▼U, C, R, T and L models

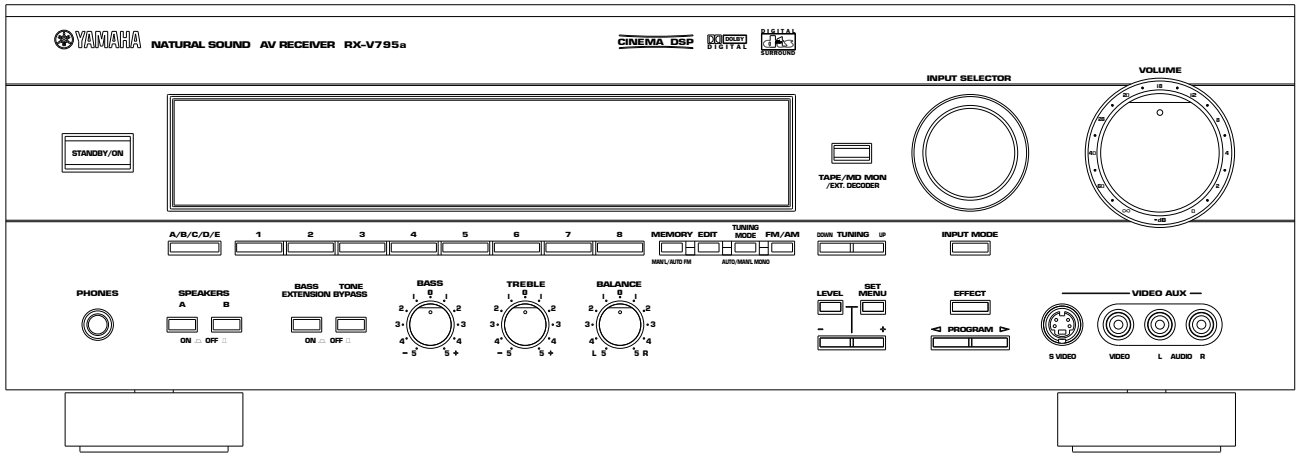


▼A, B and G models

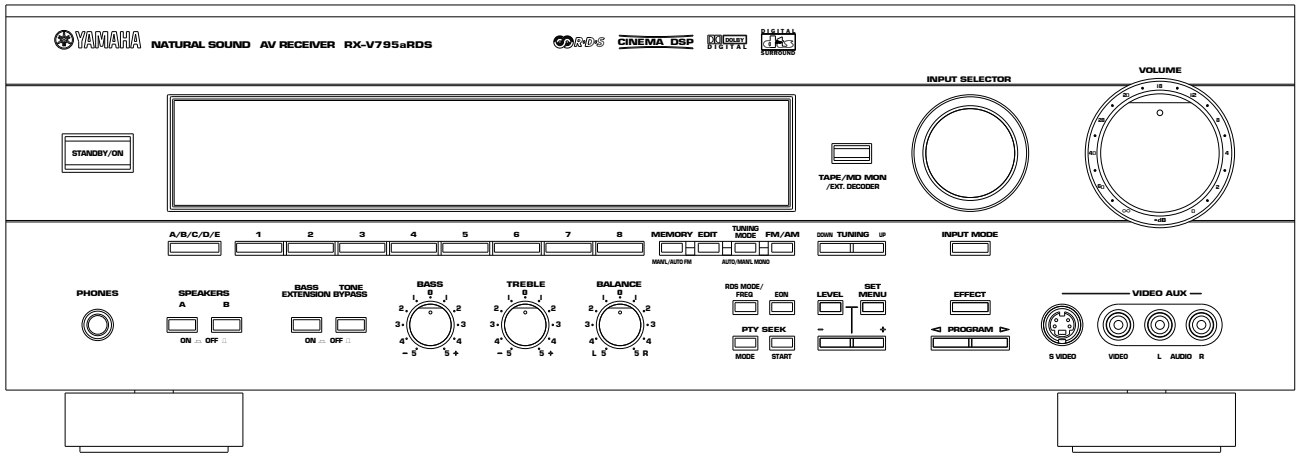


■ FRONT PANELS

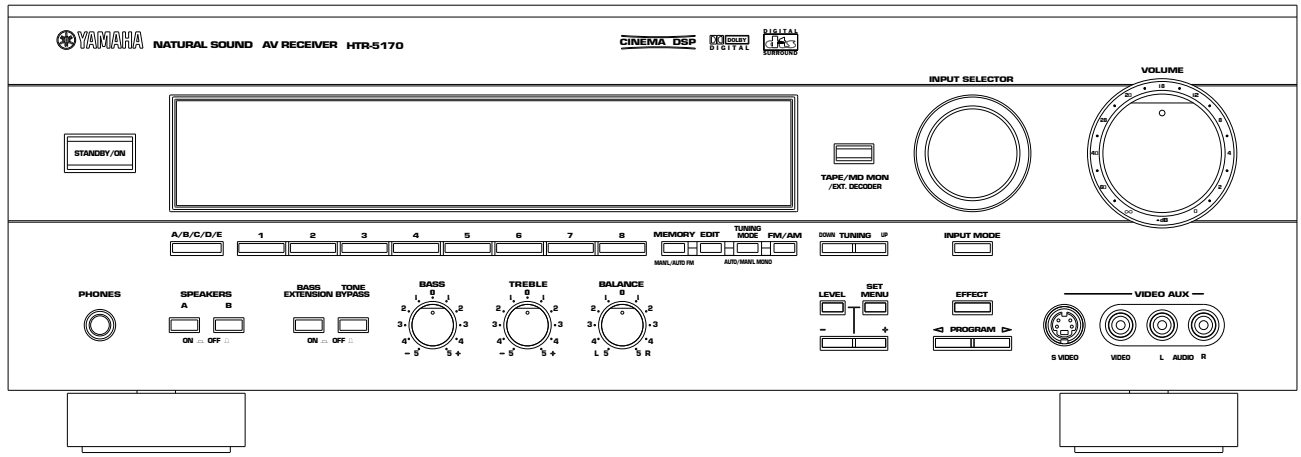
▼RX-V795a



▼RX-V795aRDS B, G models

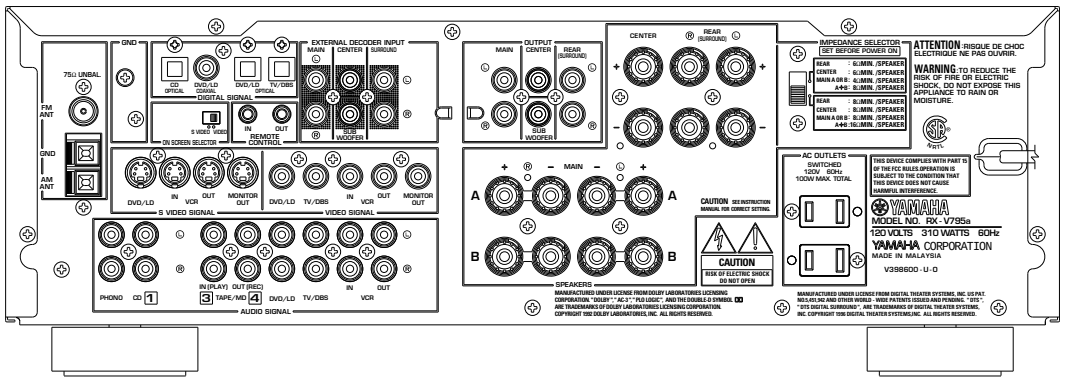


▼HTR-5170

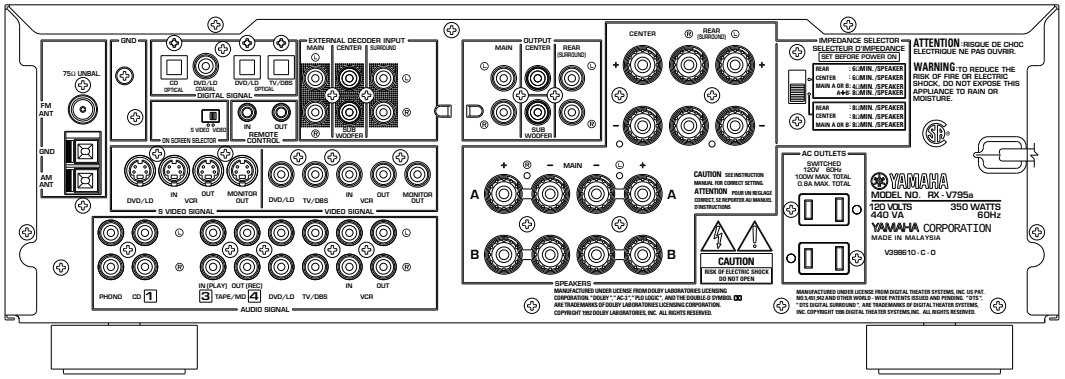


■ REAR PANELS

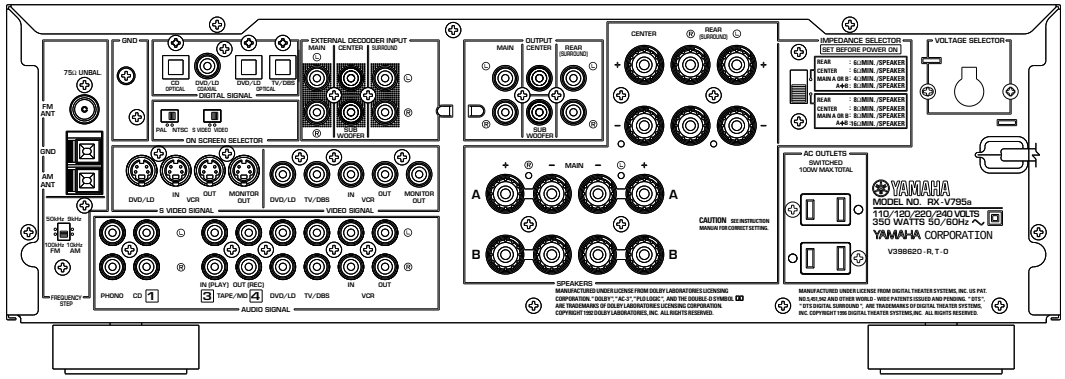
▼RX-V795a/HTR-5170 U model



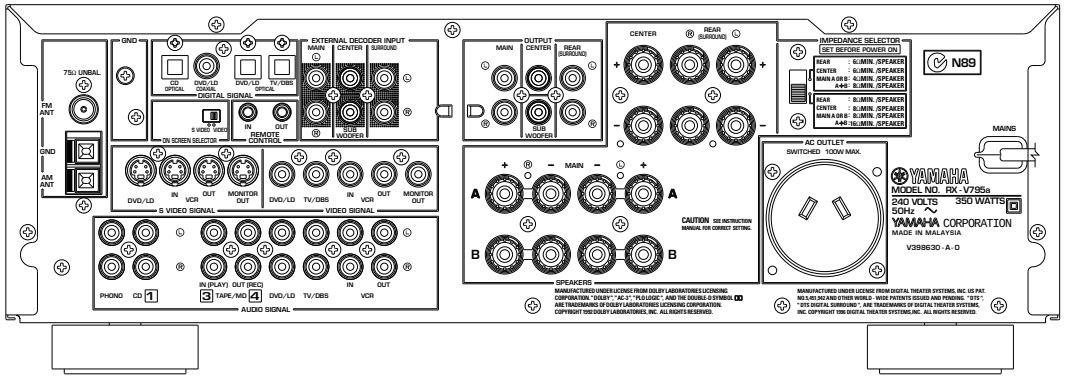
▼RX-V795a/HTR-5170 C model



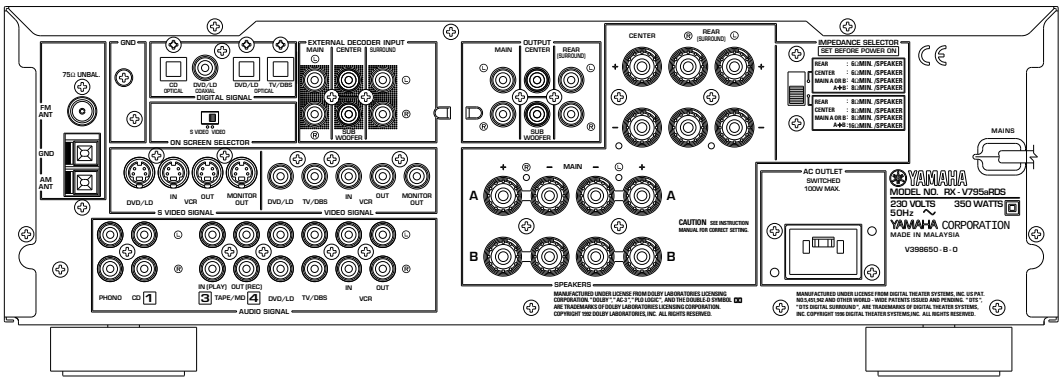
▼RX-V795a/HTR-5170 R, T models



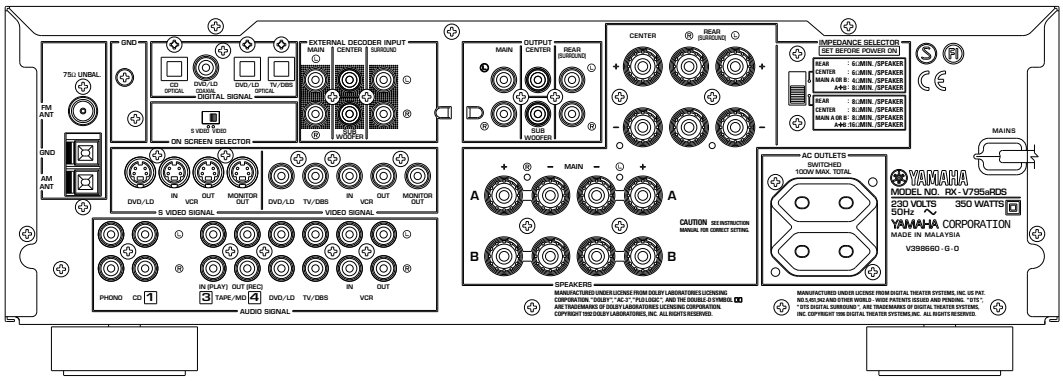
▼RX-V795a/HTR-5170 A model



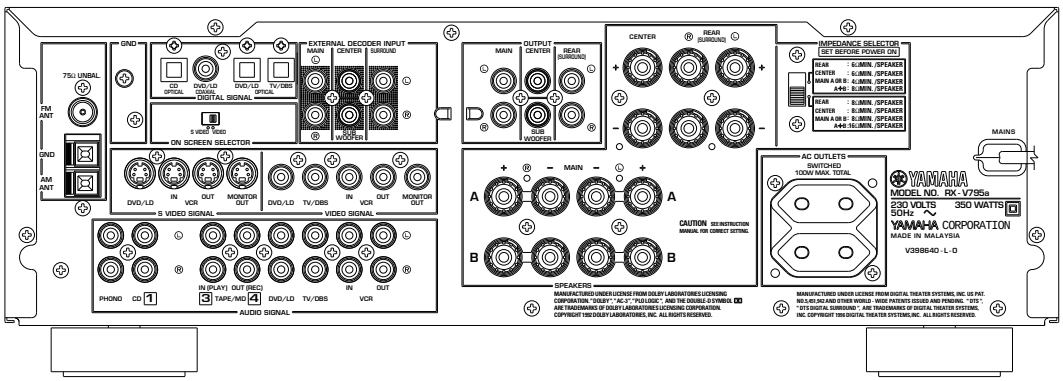
▼RX-V795aRDS B model



▼RX-V795aRDS G model

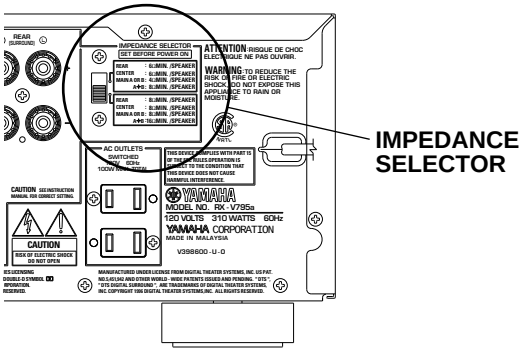


▼RX-V795a L model



WARNING

Do not change the IMPEDANCE SELECTOR switch setting while the power to this unit is on, otherwise this unit may be damaged.



■ SPECIFICATIONS

■ AUDIO SECTION

Minimum RMS Output Power per Channel
RX-V795a
MAIN, 20Hz to 20kHz, 0.04% THD, 8Ω ..... 85W+85W
CENTER, 20Hz to 20kHz, 0.04% THD, 8Ω 85W
REAR, 20Hz to 20kHz, 0.04% THD, 8Ω ..... 85W+85W
HTR-5170
MAIN, 1kHz, 0.07% THD, 8Ω ..... 100W+100W
CENTER, 1kHz, 0.07% THD, 8Ω 100W
REAR, 1kHz, 0.07% THD, 8Ω ..... 100W+100W
Maximum Power per Channel (R,T models only)
MAIN L/R, 1kHz, EIAJ, 10% THD, 8Ω ..... 125W+125W
CENTER, 1kHz, EIAJ, 10% THD, 8Ω 125W
REAR L/R, 1kHz, EIAJ, 10% THD, 8Ω ..... 125W+125W
Dynamic Power per Channel (IHF)
MAIN L/R, 8/6/4/2Ω 115/140/170/200W
Dynamic Headroom (U, C, models only)
MAIN L/R, 8Ω 1.31dB
DIN Standard Output Power Per Channel
B, G, L Models
MAIN L/R, 1kHz, 0.7% THD, 4Ω 130W
IEC Power (L model only)
MAIN L/R, 1kHz, 0.04% THD, 8Ω 95W
Power Band Width
MAIN L/R, 0.09% THD, 40W/8Ω ..... 10Hz to 50kHz
Damping Factor
MAIN L/R, 20Hz to 20kHz, (SP.A) 8Ω ..... 80 or more
Input Sensitivity/Impedance
PHONO MM 2.5mV/47kΩ
CD, etc 150mV/47kΩ
Maximum Input Signal Level
PHONO MM, 1kHz, 0.04% THD ..... 110mV or more
CD, etc, 1kHz, 0.5% THD (Effect on) ..... 2.2V or more
Output Level/Impedance
REC OUT 150mV/1.0kΩ
PRE OUT 2.6V/1.1kΩ
SUB WOOFER (MAIN SP : SMALL) 4.0V/1.2kΩ
Headphone Jack Rated Output/Impedance
1kHz, 150mV, 8Ω 0.55V/390Ω
Frequency Response (20Hz to 20kHz)
CD, etc, MAIN ..... 0±0.5dB
RIAA Equalization Deviation (20Hz to 20kHz)
PHONO MM ..... 0±0.5dB
Total Harmonic Distortion (20Hz to 20kHz)
PHONO MM to REC OUT (1V) ..... 0.02% or less
CD, etc to MAIN SP OUT (40W/8Ω) ..... 0.025% or less
Signal-to-Noise Ratio (IHF-A-Network)
PHONO MM, Input Shorted (5mV) REC OUT
U, C, R, T models ..... 86dB or more
B, G, A, L models ..... 82dB or more
CD, etc, Input Shorted, SP OUT (Effect off) ..... 96dB or more
Residual Noise (IHF-A-Network)
MAIN L/R, SP OUT ..... 170μV or less
Channel Separation (Vol. –30dB, Effect off)
PHONO MM, Input Shorted, 1kHz/10kHz .....
60dB or more/55dB or more
CD, etc, Input 5.1kΩ Shorted, 1kHz/10kHz .....
60dB or more/45dB or more
Tone Control Characteristics
BASS : Boost/cut ..... ±10dB (50Hz)
Turnover Frequency 350Hz
TREBLE : Boost/cut ..... ±10dB (20kHz)
Turnover Frequency 3.5kHz
Filter Characteristics
MAIN, REAR SP SMALL : H.P.F. ..... fc = 90Hz, 12dB/oct.
SUB WOOFER : L.P.F. ..... fc = 90Hz, 18dB/oct.
Bass Extension (MAIN L/R) ..... +6dB (50Hz)
Gain Tracking Error (0dB to –60dB) ..... 3dB or less
Tuner Output Level/Impedance
FM (100% mod.)
1kHz U, C, R, T models 550mV
40kHz Dev. A, B, G, L models 550mV
AM (30% mod. 1kHz) 150mV

■ FM SECTION

Tuning Range
U, C models ..... 87.5 to 107.9MHz
A, B, G, L models ..... 87.50 to 108.00MHz
R, T models ..... 87.5 to 108.0/87.50 to 108.00MHz
50dB Quieting Sensitivity (IHF, 75 Ω)
U, C, R, T models only
Mono 1.6μV (15.3dBf)
Stereo 23μV (38.5dBf)
Usable Sensitivity (75 Ω)
A, B, G, L models only
DIN, MONO (S/N 26dB) 0.9μV
DIN, STEREO (S/N 46dB) 28μV
Alternate Channel Selectivity (±400kHz)
U, C, R, T models only 75dB
Selectivity (two signals, 40kHz Dev.)
A, B, G, L models only 55dB
Signal-to-Noise Ratio
Mono/Stereo (IHF)
U, C, R, T models 81/75dB
Mono/Stereo (DIN-weighted, 40kHz Dev.)
A, B, G, L models 75/69dB
Harmonic Distortion
Mono/Stereo (1kHz) 0.1/0.2%
Stereo Separation
1kHz 48dB
Frequency Response
20Hz to 15kHz ..... 0±1.0dB

■ AM SECTION

Tuning Range
U, C models ..... 530 to 1,710kHz
A, B, G, L models ..... 531 to 1,611kHz
R, T models ..... 530 to 1,710/531 to 1,611kHz
Usable Sensitivity 300μV/m
Signal-to-Noise Ratio 52dB

■ VIDEO SECTION

Video Signal Type
U, C models ..... NTSC
A, B, G, L models ..... PAL
R, T models ..... NTSC/PAL
Video Signal Level 1Vp-p/75Ω
S-Video Signal Level
Y 1Vp-p/75Ω
C 0.286Vp-p/75Ω
Maximum Input Level ..... 1.5Vp-p or more
Signal-to-Noise Ratio ..... 50dB or more
Monitor Output Frequency Response .. 5Hz to 10MHz, –3dB

■ GENERAL

Power Supply
U, C models ..... AC 120V, 60Hz
A model ..... AC 240V, 50Hz
B, G, L models ..... AC 230V, 50Hz
R, T models ..... AC 110/120/220/240V, 50/60Hz
Power Consumption
U model 310W
C model 350W/440VA
A, B, G, L, R, T models 350W
Maximum Power Consumption (R model only) 690W
AC Outlets
U, C, G, L, R, T models, Switched x 2 ... 100W max (Total)
B, A model, Switched x 1 ..... 100W max
Dimensions (W x H x D) ..... 435 x 151 x 391mm
(17-1/8" x 5-15/16" x 15-3/8")
Weight ..... 13.0kg (28 lbs 11oz)
Accessories ..... AM loop antenna x 1
Indoor FM antenna x 1
Remote Control Transmitter x 1
Battery (size "AA", "R06") x 2

** Specifications are subject to change without notice.*

U ..... USA model
C ..... Canadian model
A ..... Australian model
B ..... British model
G ..... European model
L ..... Singapore model
R ..... General model
T ..... China model

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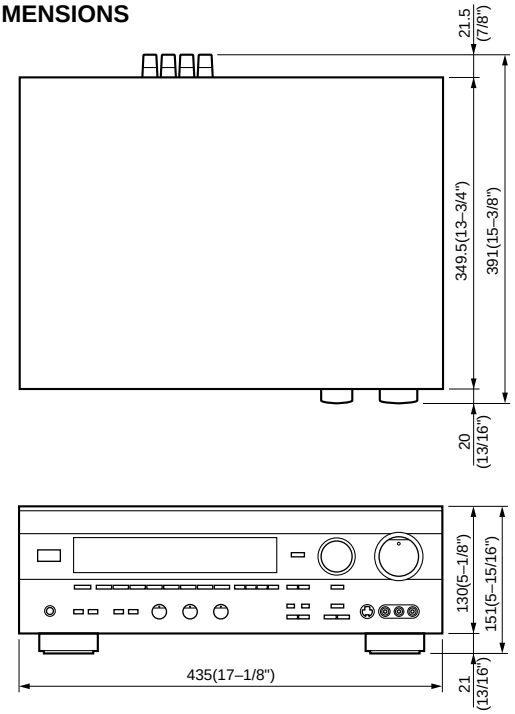
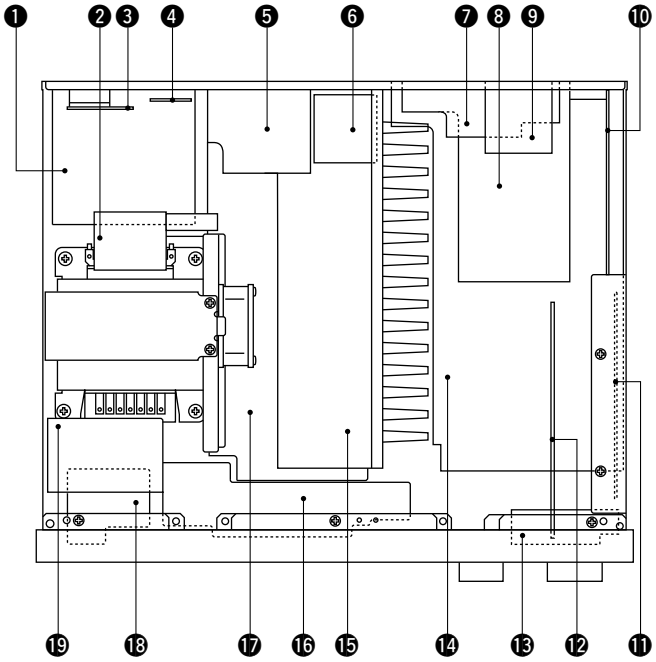
● DIMENSIONS



Units : mm (inch)

■ INTERNAL VIEW



❶ P. C. B. INPUT (3)
❷ P. C. B. MAIN (6)
❸ P. C. B. INPUT (4) (R, T models)
❹ P. C. B. MAIN (5)
❺ P. C. B. VIDEO (2)
❻ P. C. B. MAIN (7)
❼ P. C. B. OPERATION (4)
❽ P. C. B. VIDEO (1)
❾ P. C. B. OPERATION (5)
❿ P. C. B. TUNER
⓫ P. C. B. DSP
⓬ P. C. B. OPERATION (2)
⓭ P. C. B. OPERATION (6)
⓮ P. C. B. INPUT(1)
⓯ P. C. B. MAIN(2)
⓰ P. C. B. OPERATION (3)
⓱ P. C. B. MAIN (1)
⓲ P. C. B. MAIN (4)
⓳ P. C. B. MAIN (3)

■ DISASSEMBLY PROCEDURES (Remove parts in disassembly order as numbered.)

1. Removal of Top Cover
a. Remove 4 screws (①), and 4 screws (②) in Fig. 1.

2. Removal of Bottom Cover
a. Remove 6 screws (③) in Fig. 1.

3. Removal of Front Panel
a. Remove 5 knobs.
b. Remove 6 screws (④) in Fig. 1.

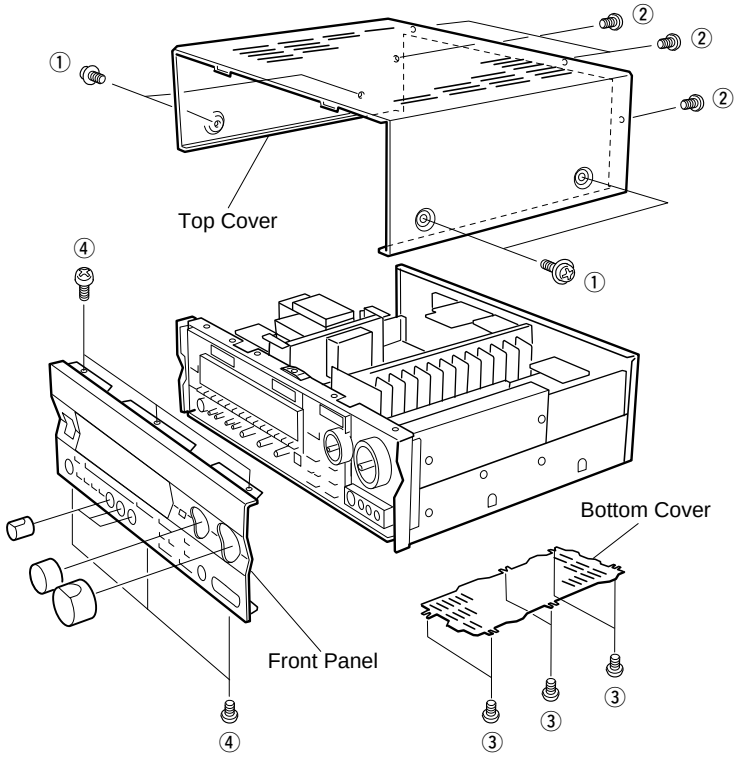


Fig. 1

■ SELF DIAGNOSIS FUNCTION

1. PURPOSE AND OPERATION

The RX-V795a/RDS/HTR-5170 has a Self Diagnosis Function to locate a faulty part, if any, by inspecting and taking measurements.

There are 11 main items in the diagnostic menu and some of them have sub-menu items as listed below.

No.	MAIN MENU	SUB MENU	REMOTE CODE
1	ANALOG THROUGH	1. MAIN BYPASS 2. DSP 0dB	7A–88 : DSP/1 – – –
2	DSP THROUGH	1. YSS918–SRAM 2. YSS918 3. DSP FULL BIT	7A–89 : DSP/2 – – – – – –
3	AC–3/DTS THROUGH	1. STATUS (BINARY FORM)	– – –
4	PRO LOGIC	1. CENTER LARGE 2. EFFECT OFF	7A–8A : DSP/3 – – –
5	SPEAKERS SET	1. MAIN : SMALL 0dB 2. MAIN : LARGE 0dB 3. MAIN : LARGE –10dB 4. LFE/BASS : MAIN CENTER : NONE 5. LFE/BASS : MAIN 6. LFE/BASS : SWFR 7. CENTER : NONE 8. CENTER : SMALL REAR : SMALL 9. FRONT MIX	7A–8B : DSP/4 7A–8C : DSP/5 7A–8D : DSP/6 7A–8E : DSP/7 7A–8F : DSP/8 7A–90 : DSP/9 7A–91 : DSP/11 – – – 7A–85 : DSP/15
6	EFFECT OFF /DISPLAY CHECK	1. EFFECT OFF 2. VFD DISP OFF 3. VFD DISP ALL 4. VFD DIMMER 5. CHECKED PATTERN	7A–56 : DSP or ···/16 – – – – – – – – – – – –
7	MANUAL TEST	1. ALL 2. MAIN L 3. CENTER 4. MAIN R 5. REAR R 6. REAR L 7. LFE	– –
8	FACTORY PRESET	1. INHIBIT(Inhibit Memory Init) 2. RESERVED (Init. Memory)	– – – – – –
9	AD DATA CHECK	1. AD CHECK : 000 2. KEYO, KEY1 3. KEY2, REC OUT 4. TUNING SIGNAL HEAT SINK TEMP. 5. DC PROTECTION PS PROTECTION	– – – – – – – – – – – – – – –
10	STATUS	1./2. DSP CPU STATUS (1)/(2) 3./4. CHANNEL STATUS (1)/(2) 5./6. SUB CPU VERSION (1)/(2) 7./8. SUB CPU CHECK SUM (1)/(2) 9./10. BSI0 (1)/(2) 11./12. BSI1 (1)/(2) 13./14. BSI2 (1)/(2) 15./16. BSI3 (1)/(2) 17./18. BSI4 (1)/(2) 19./20. BSI5 (1)/(2)	– –
11	VERSION CHECK /CPU CHECK SUM /EXIT	1. MAIN MC CHECK SUM 2. DSP MC CHECK SUM 3. MAIN M.C. VERSION 4. SUB M.C. VERSION 5. PORT INFORMATION 6. EXIT	– – – – – – – – – – – – – – – – – –

2. BEGINNING AND CANCELLATION

(1) STARTING UP THE FUNCTION AND THE DISPLAY

There are two ways to start up. One is by using the front panel keys, another is by using the remote control transmitter. After starting up, the menu No. 1 is displayed.

A. How to start test mode

There is a method of starting the self-diagnosis function.

Using the keys on the main unit:

Hold down the "INPUT MODE" and "FM/AM" keys simultaneously, and press the "STANDBY/ON" key; submenu No. 1 of diagnosis main menu No. 1 will start.

B. Settings for start-up of diagnostic program

The settings used when starting the diagnostic program are as follows.

1. EFFECT LEVEL :

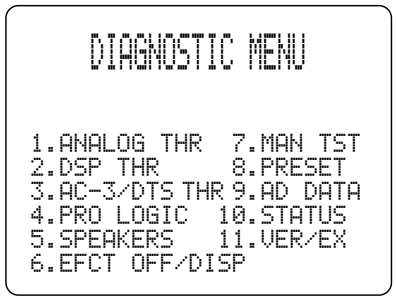
CHANNEL	CENTER	R SUR.	L SUR.	SWFR
LEVEL (dB)	0	0	0	0

2. MUTING : OFF
3. INPUT (VIDEO) : DVD/LD (DVD/LD)
4. CENTER SPEAKER : LARGE
5. REAR SPEAKER : LARGE
6. MAIN SPEAKER : LARGE
7. LFE/BASS OUT : SWFR

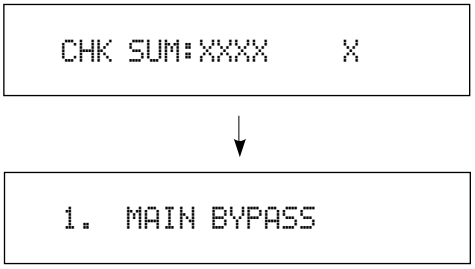
C. Start-up display

The diagnostic menu list appears on the monitor screen and the information of the protection function appears on the front panel display of the main unit.

MONITOR SCREEN



On the FL display of the main unit, an opening message (or the history of the protection) appears for 2 seconds before the diagnostic menu No.1 MAIN BYPASS.



● **FL display at start-up of diagnostic program**

When the diagnostic program has started, the history (*2) of the protection function (*1) is displayed. If the protection function has been activated in the past, the type and voltage value are displayed. After a few seconds the diagnosis function menu will appear.

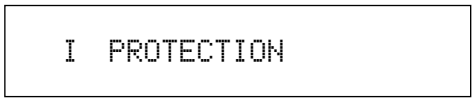
(*1) If some faulty condition is detected in the excess current, the power source or the DC, the power will be turned off automatically.

(*2) The protection records will be cleared when "PRESET RSRVD" is selected in diagnosis menu No. 8 and FACTORY PRESET is engaged.

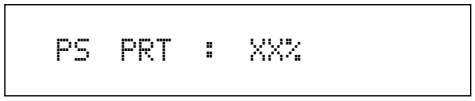
● **History of protection function**

Each case of the history of the protection function is displayed as shown below.

Main microprocessor check sum (4-digit, hexadecimal) and version (one letter) display
* Used when checking on-board writing to main microprocessor.

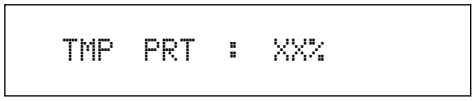


Appears when the current protection function is operating.
When power is turned on in an abnormal status, the power relay will come on, protection will operate immediately, and power will turn off.



Appears when the power protection function is operating.
For the % value, the voltage at that point is shown by 5V/100%.
When power is turned on in an abnormal status, power will turn off after half a second.

Appears when the power amp DC protection function is operating.
For the % value, the voltage at that point is shown by 5V/100%.
When power is turned on in an abnormal status, power will turn off after two seconds.



Appears when the heat sink thermal protection function is operating. For the % value, the voltage at that point is shown by 5V/100%.
When power is turned on in an abnormal status, power will turn off after one second.

* For the voltages of Power and DC protection functions, see diagnosis menu No.9, which will be described later.

(2) EXITING METHOD

The diagnosis function can be exited by any of the following procedures. Take care with the setting of backup memory initialization menu (diagnosis No. 8) when exited the diagnosis function:

1. Select diagnosis menu No. 11/submenu No. 6 "EXIT".
2. Press the "STANDBY/ON" key on the main unit or "STANDBY" key on the remote control to turn power off.

3. OPERATION AND DISPLAY WHEN STARTING DIAGNOSIS FUNCTION

(1) Selection of diagnostic menu

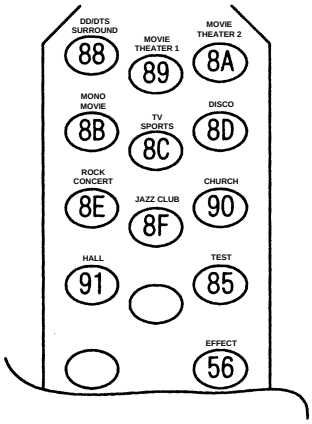
The diagnostic menu and the sub-menu can be selected by using the front panel keys of the main unit or the remote control unit.

● Selection by using the front panel keys

The main menu can be changed cyclically by using the "TUNING UP/DOWN" keys; and the submenu, by using the "PROGRAM -/+" keys. The "+" or "UP" key will increase the main or submenu number.

● Selection by using the remote control unit

The remote control codes in the menu list (on page 8) correspond to the DSP program, test and effect keys. See the figure on the right.



(2) Display during Menu Operation

During diagnosis function, the diagnostic menu will appear on the superimposed screen, except for main menu No. 6. As a rule, the main menu No. and submenu No. will appear in the FL display.

(3) Other functions available while diagnosis function is active

Listed below are the other functions available while the diagnosis function is active.

- Selecting input source (Tape monitor/Ext. decoder)
- Adjusting effect level (Center, Rear, Sub-woofer)
- Adjusting master volume
- Muting on/ off
- Tuning power off

(4) Diagnosis default status

When not otherwise specified, default settings and values in each menu are as follows:

All “SPEAKERS” : LARGE
ALL electronic VRs : 0dB
D-RANGE : MAX
LFE LEVEL : 0dB
CENTER DELAY : 0ms

4. CONTENTS OF DIAGNOSIS FUNCTION

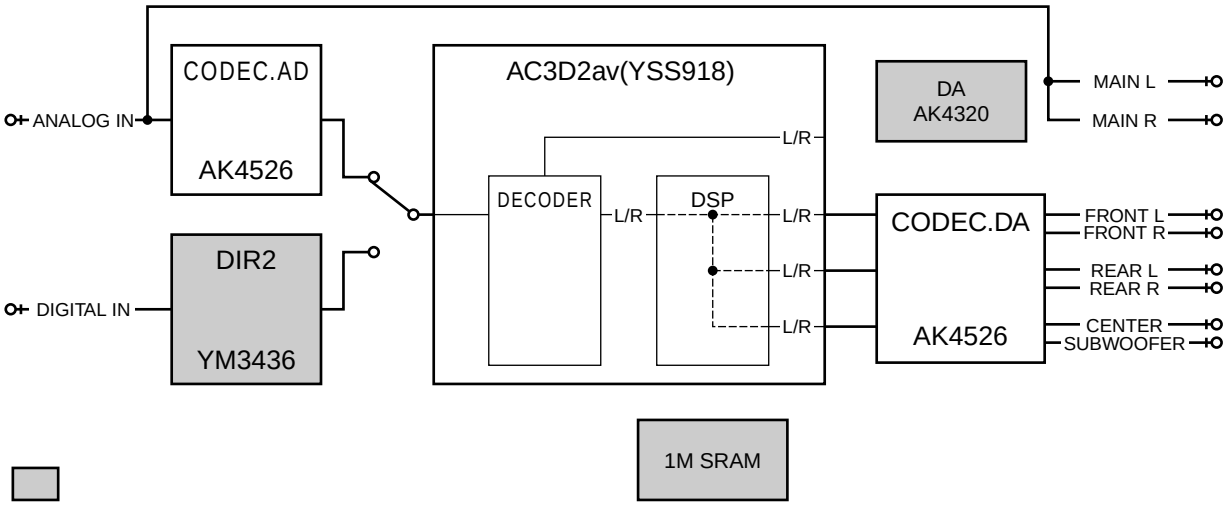
This section describes the contents of the self diagnosis function in detail.

(1) ANALOG THROUGH

The input is fixed to analog (A/D). There are two submenus.

1. MAIN BYPASS

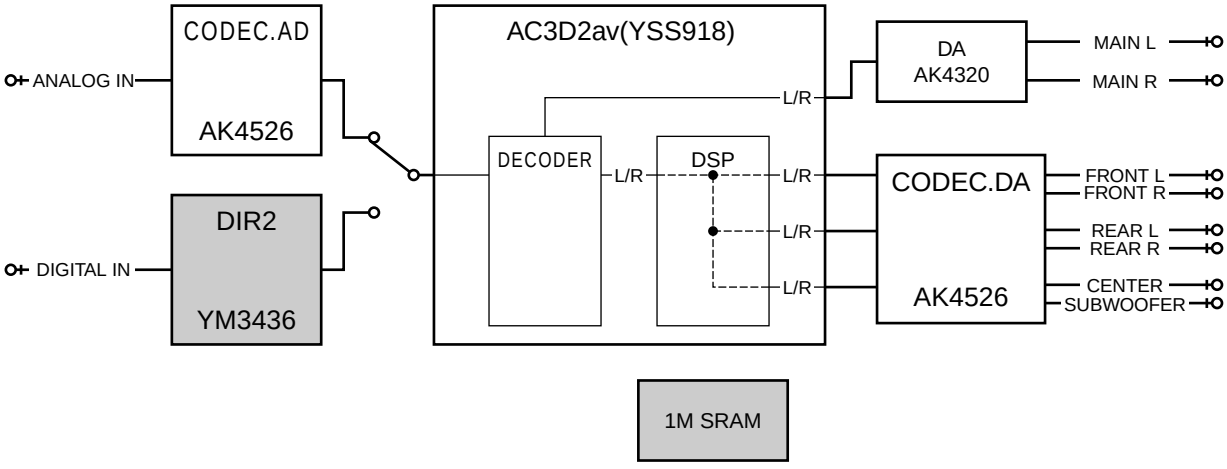
The MAIN L/R signals bypass the analog circuits to be output.
For C/LFE, FL/FR and RL/RR, the MAIN L/R signals via the DSP are output without being processed (through).
(Remote control code 7A-88 : DSP/1)



This shows that the device is not operating.

1. DSP 0dB

MAIN L/R, C/LFE, FL/FR and RL/RR pass through the DSP without being processed.

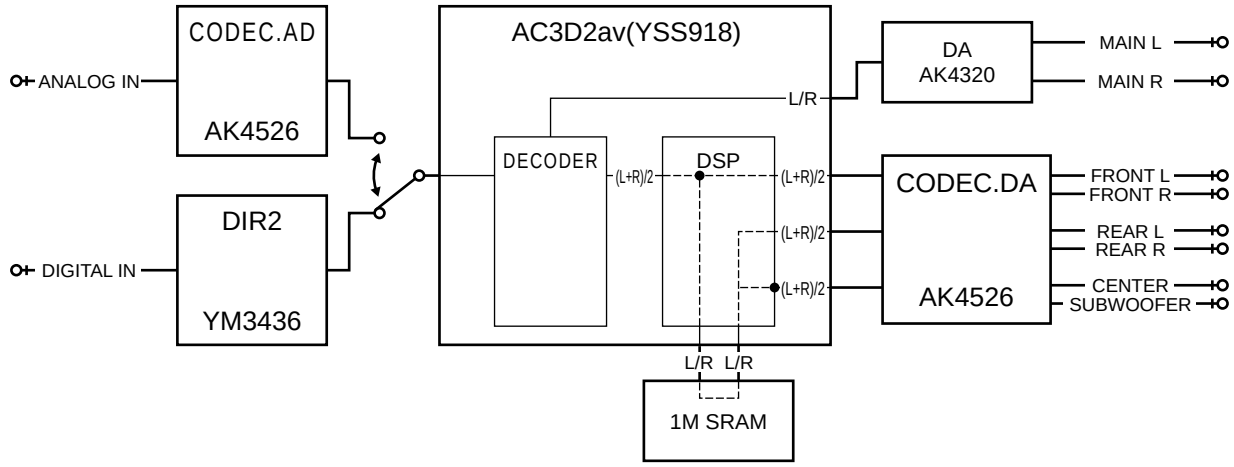


(2) DSP THROUGH

The input is automatically discriminated by signal detection and switched with priorities AC3>DTS>PCM AUDIO>analog. There are the following three submenus.

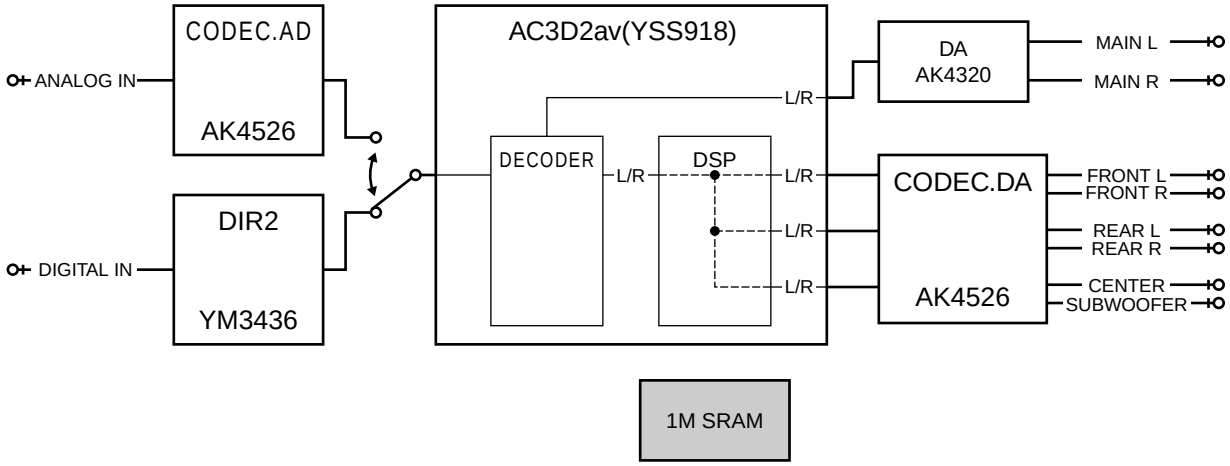
2. YSS918-SRAM

MAIN L/R are input to the DSP via AC3D2av, pass through SRAM, and are then output to all channels without being processed. (Remote control code 7A-89 : DSP/2)



2. YSS918

MAIN L/R are input to the DSP via AC3D2av, and then output to all channels without being processed.



2. DSP FULL BIT

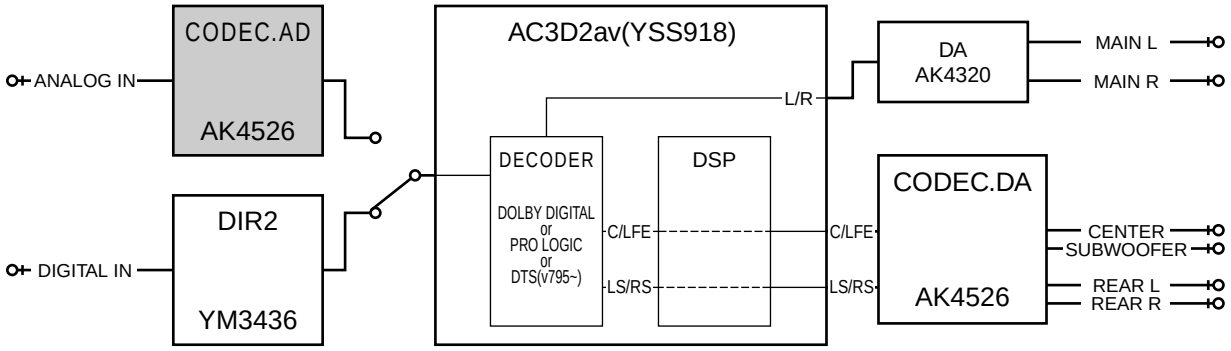
MAIN L/R are input to the DSP via AC3D2av, and then output to all channels without being processed.
The head margin is abolished, and DSP outputs digital full-bit signals.
Same as the above menu, except that the digital data is output to DA with full bits.

(3) AC3/DTS THROUGH

The input is digital signal only. Dolby Digital (AC-3) or DTS decoding operation is executed, according to the input source.

3. ST:10001001

AC3 decoded signals are output to each channel via AC3D2av.



Ac3 Status Info. : Bit 7 6 5 4 3 2 1 0

1 0 0 0 1 0 0 1

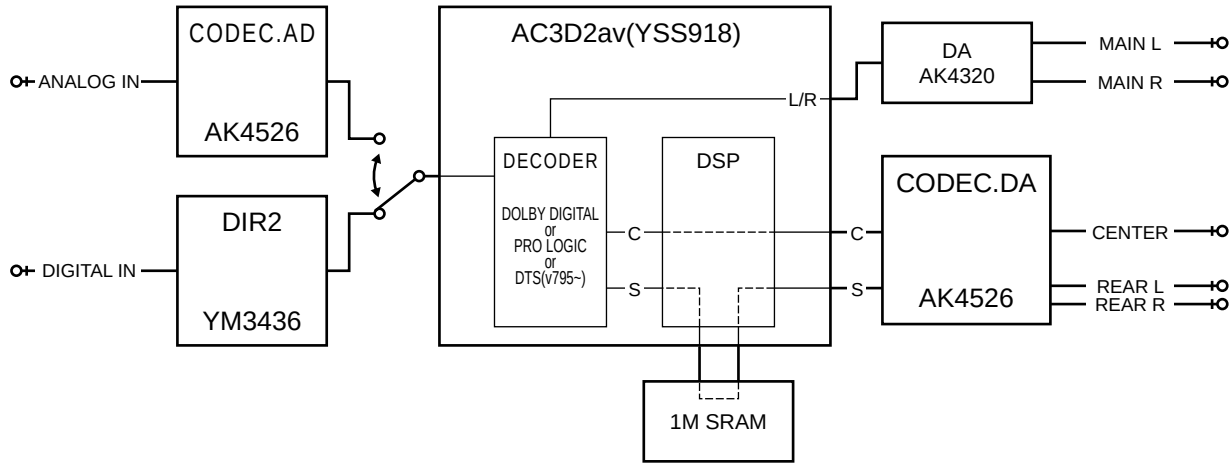
- 1 during AC3 decode OK
- 1 during DTS decode OK
- 1 during red DTS lock
- 1 for audio other than PCM linear audio
- Demodulator muting (without RF signal)
- IEC958 digital format error
- IEC958 commercial-use device bit
- IEC958 digital data bit

(4) PRO LOGIC

The input is automatically discriminated by PCM>analog. DTS is prohibited.
The submenu is switched between PRO LOGIC (AUTO BALANCE OFF) and EFFECT OFF.

4. PRO CNTR:LRG

The input is automatically detected whether it is RF, PCM or analog. With analog, PCM audio or Dolby Digital (AC-3) 2/0 input, the L, R, C and S signals are prologic decoded and output. With Dolby Digital (AC-3) other than 2/0, PRO LOGIC does not operate, and Dolby Digital (AC-3) playback is executed. (Remote control code 7A-8A : DSP/3)



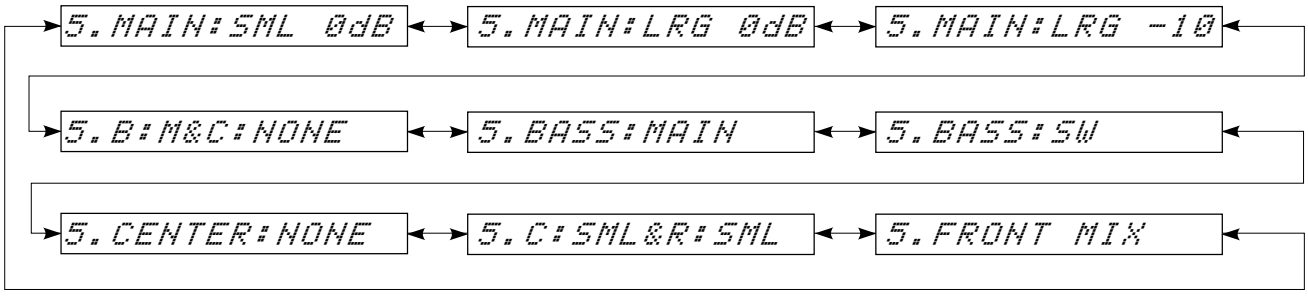
4. PRO EFECT:OFF

MAIN L/R are bypassed and output.

(5) SPEAKERS SET

The input is automatically discriminated by AC3>DTS>PCM>analog. The L/R signals are output to the channels specified by the submenu without being processed (through).

There are the following 9 submenu items: The signal from the DSP block is normally in the effect off status for menu items 1-4. For other menu items, the same signal as in 2. DSP THROUGH: YSS918 menu is output.



The analog switches in each submenu are set as follows:

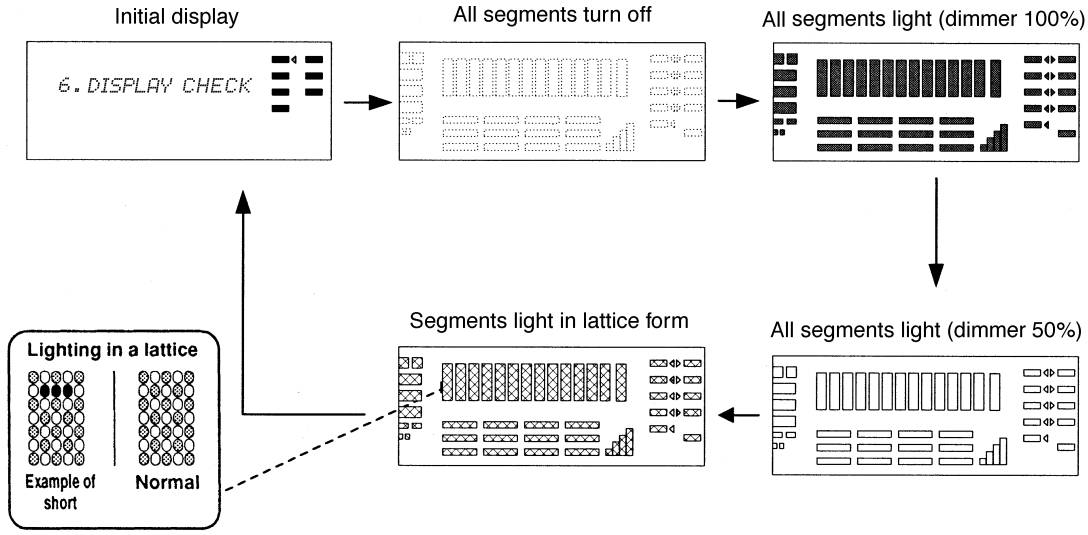
	SUB MENU	REMOTE CODE	CENTER SP	REAR SP	MAIN SP	MAIN LVL	LFE/BASS	OUTPUT
1	MAIN:SML 0dB	7A-8B	LARGE	LARGE	SMALL	0dB	SWFR	MAIN L/R
2	MAIN:LRG 0dB	7A-8C	LARGE	LARGE	LARGE	0dB	SWFR	MAIN L/R
3	MAIN:LRG -10	7A-8D	LARGE	LARGE	LARGE	-10dB	SWFR	MAIN L/R
4	B:M&C:NONE	7A-8E	NONE	LARGE	LARGE	0dB	MAIN	MAIN L/R
5	BASS:MAIN	7A-8F	LARGE	LARGE	LARGE	0dB	MAIN	LFE -> L/R
6	LFE/BASS:SWFR	7A-90	LARGE	LARGE	LARGE	0dB	SWFR	LFE -> SWFR
7	CENTER:NONE	7A-91	NONE	LARGE	LARGE	0dB	SWFR	CENTER -> L/R
8	C:SML&R:SML	– – –	SMALL	SMALL	LARGE	0dB	SWFR	CENTER/REAR
9	FRONT MIX	7A-85	LARGE	LARGE	LARGE	0dB	SWFR	FRONT -> L/R

LARGE: Mode in which speakers with high bass-sound playback capability (large unit) are used. Full frequency band widths is output.
SMALL : Mode in which speakers with low bass-sound playback capability (small unit) are used. Frequencies below 90 Hz are mixed with the channel specified by LFE/BASS.
NONE : Mode in which center speaker is not used. The center audio signal is reduced by 3dB and mixed into MAIN L/R.
M : MAIN
C : CENTER
R : REAR
SWFR : SUBWOOFER
B : BASS
Output : The signal before MASTER VOLUME is indicated.

(6) DISPLAY CHECK

Check program for FL display. The display status will change as follows with submenu operation. The signal is processed with EFFECT OFF.

For switching between internal and external sync commanded by the microprocessor, the forced external sync is selected. (Remote control code 7A-56 : DSP/16)

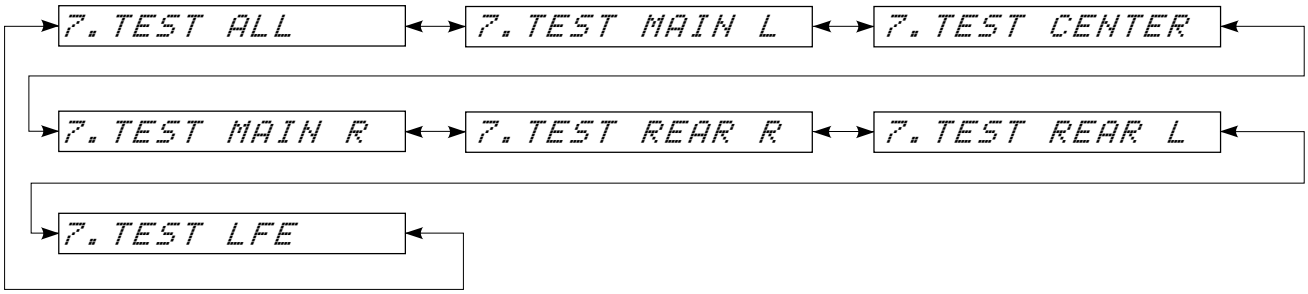


All segments are turned on and off to detect defects in the FL driver (IC102) and FL display segments. Then the FL driver operation is checked by the dimmer control.

Finally, all segments are turned on and off alternately (in lattice form), to check for a short-circuit between adjacent segments.

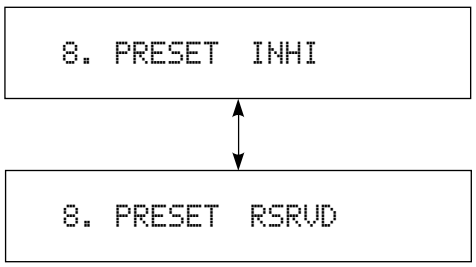
(7) MANUAL TEST

The noise generator built into the DSP outputs test noise from the channel specified by the submenu.



(8) FACTORY PRESET

The initialization of the backup RAM, which contains DSP sound field parameters, set menu contents, etc. is reserved or inhibited. The signal is processed with EFFECT OFF.



Inhibits initialization of the RAM. Specify this option to protect user set values.

Reserve to initialize the backup RAM. (The RAM is actually initialized when power is turned on next time.) Specify this option at the factory or to reset the RAM. For each initial value, see page 20.

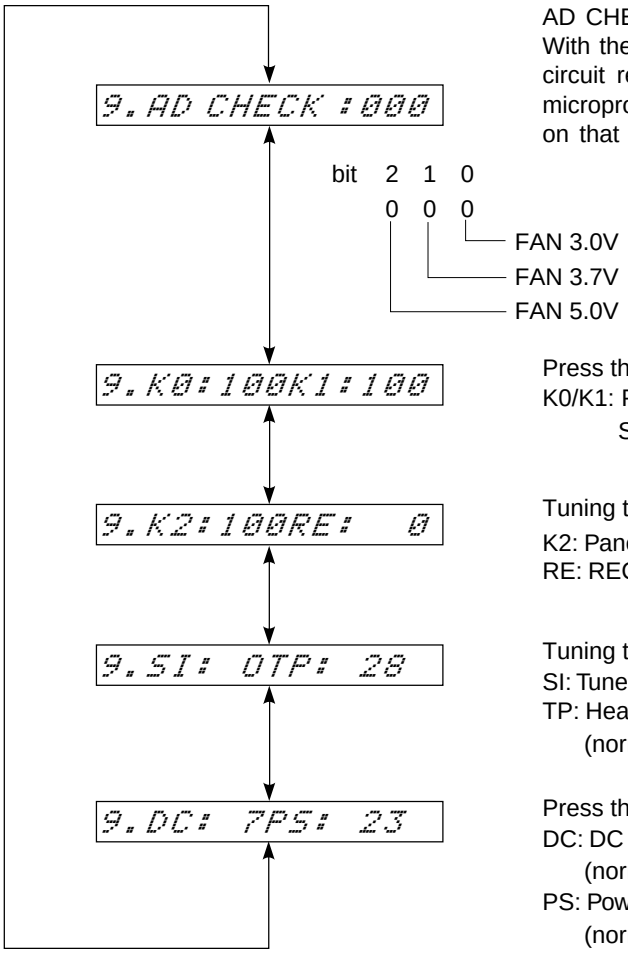
CAUTION : Before setting to the PRESET RESERVED, write down the existing preset memory content of the Tuner in a table as shown below. (This is because setting to the PRESET RESERVED will cause the user memory content to be erased.)

Preset group	P1	P2	P3	P4	P5	P6	P7	P8
A								
B								
C								
D								
E								

(9) AD DATA CHECK

The A/D conversion values of the main CPU which detects key scan, protection, etc. are displayed in % (100%: 5V). All signal processing before this menu is executed will be held.

The keys on the main unit cannot be operated to detect the values of all keys in the K0/K1 and K2/RE pages. Turning the rotary encoder (input selector on the main unit) will switch the submenu.



AD CHECK : FAN control based on detected temperature
With the voltage value detected from the temperature detection circuit read as a temperature data by the A/D function of the microprocessor, the FAN speed is controlled in 3 levels based on that data.

When there is drive history record : 1
* Selecting “RESERVED” from the Diag menu No.8 and using factory presetting will clear the history.

Press the “PROGRAM ▷” key.
K0/K1: Panel key on main unit
See Table 1.

Tuning the rotary encoder.
K2: Panel key on main unit
RE: REC OUT (value : 0)

Tuning the rotary encoder.
SI: Tuner signal level
TP: Heat sink temperature
(normal value: 6-40)

Press the “PROGRAM ▷” key.
DC: DC protection value
(normal value: 1-13)
PS: Power voltage protection value
(normal value: 18-29)

AD Value	0	10	20	30	40
K0	TUNING UP	TUNING DOWN	FM/AM	TUNING MODE	EDIT
K1	A/B/C/D/E	1	2	3	4
K2	EXT. DECODER	INPUT MODE	EFFECT	PROG >	PROG <

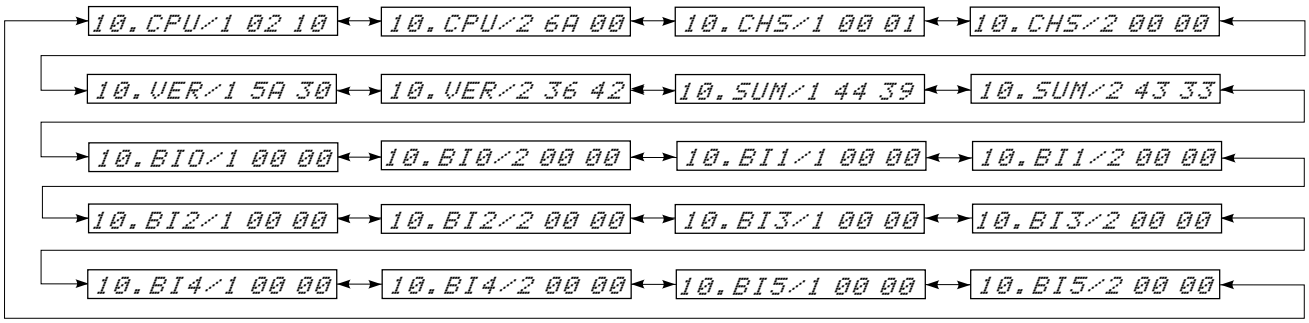
AD Value	50	60	70	80	90
K0	MEMORY	EON	RDS MODE/FREQ	PTY START	PTY MODE
K1	5	6	7	8	×
K2	+	–	SET MENU	LEVEL	×

Caution

1. If K0/K1/K2 are more than ±4% from the reference values, normal operation will not be executed.
2. If TP is 5% or less, the protection function will operate and power will turn off. If it is 40% or more, it is possible that there is an abnormality in the thermal detection system.
3. If DC and PS are outside the normal values, the protection function will operate and power will turn off.

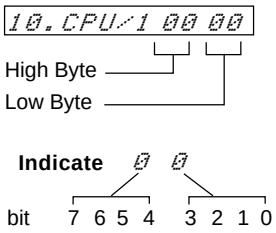
(10) STATUS FROM DSP MICOM

The status data from the DSP microprocessor is sequentially displayed in a hexadecimal number.
All signal processing before this menu is executed will be held.



[CPU/1] **<High Byte>**

bit7	MUTE Request	**bit3**	acmod 0000B:1+1 0001B:1/0
bit6	fs 000B:analog 001B:32k	**bit2**	0010B:2/0 0011B:3/0
bit5	010B:44.1k 011B:48kHz	**bit1**	0100B:2/1 0101B:3/1
bit4	others:not defined	**bit0**	0110B:2/2 0111B:3/2 1000B:7.1



acmod: If it is 1000B or more with DTS 7.1 signal, the DSP block will be muted.

<Low Byte>

bit7	AC3 DECODE OK	**bit3**	DEM MUTE (without RF signal)
bit6	DTS DECODE OK	**bit2**	IEC958 digital format error
bit5	Red DTS record (flashes ad lights)	**bit1**	IEC958 commercial-use device bit
bit4	1 in audio models other than PCM linear audio	**bit0**	IEC958 digital data bit (DAT, CD-ROM, etc.)

Indicate	bit			
	3	2	1	0
	7	6	5	4
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
A	1	0	1	0
B	1	0	1	1
C	1	1	0	0
D	1	1	0	1
E	1	1	1	0
F	1	1	1	1

[Note]

IEC958: Standard to identify the PCM bit stream signal. Digital format error refers to a digital signal with the sampling frequency undefined (neither 44.1k, 32k nor 48k). Since the operation of each device cannot be assured at fs outside specifications, the sub-microprocessor handles this status as the forced analog mode (ignored even if decoding is OK from the detection terminal level), and selects the signal from the analog input terminal. Since the sub-microprocessor transmits 000B (analog) for STATUS#0 bits 4-6 to the main microprocessor, the main microprocessor visually operates in the same way as with digital unlocking.

[CPU/2] **<High Byte>**

bit7	AC3 KARAOKE	**bit3**	On-board write mode
bit6	DIR2 LOCKN	**bit2**	The number of digital inputs is 2 “0”
bit5	DIR2 ERR	**bit1**	DSP is AC3D2 (DTS present) “1”
bit4	AC3D MUTE	**bit0**	RF DEM present

<Low Byte> Always “00”

[CHS/1/2] IEC958 channel status bits 00-31 available from DIR2
<CHS/1 Hi-byte> bits 00-07
<CHS/1 Lo-byte> bits 08-15
<CHS/1 Hi-byte> bits 16-23
<CHS/1 Lo-byte> bits 24-31

[VER/1/2] 4-byte ASCII code of sub CPU version data

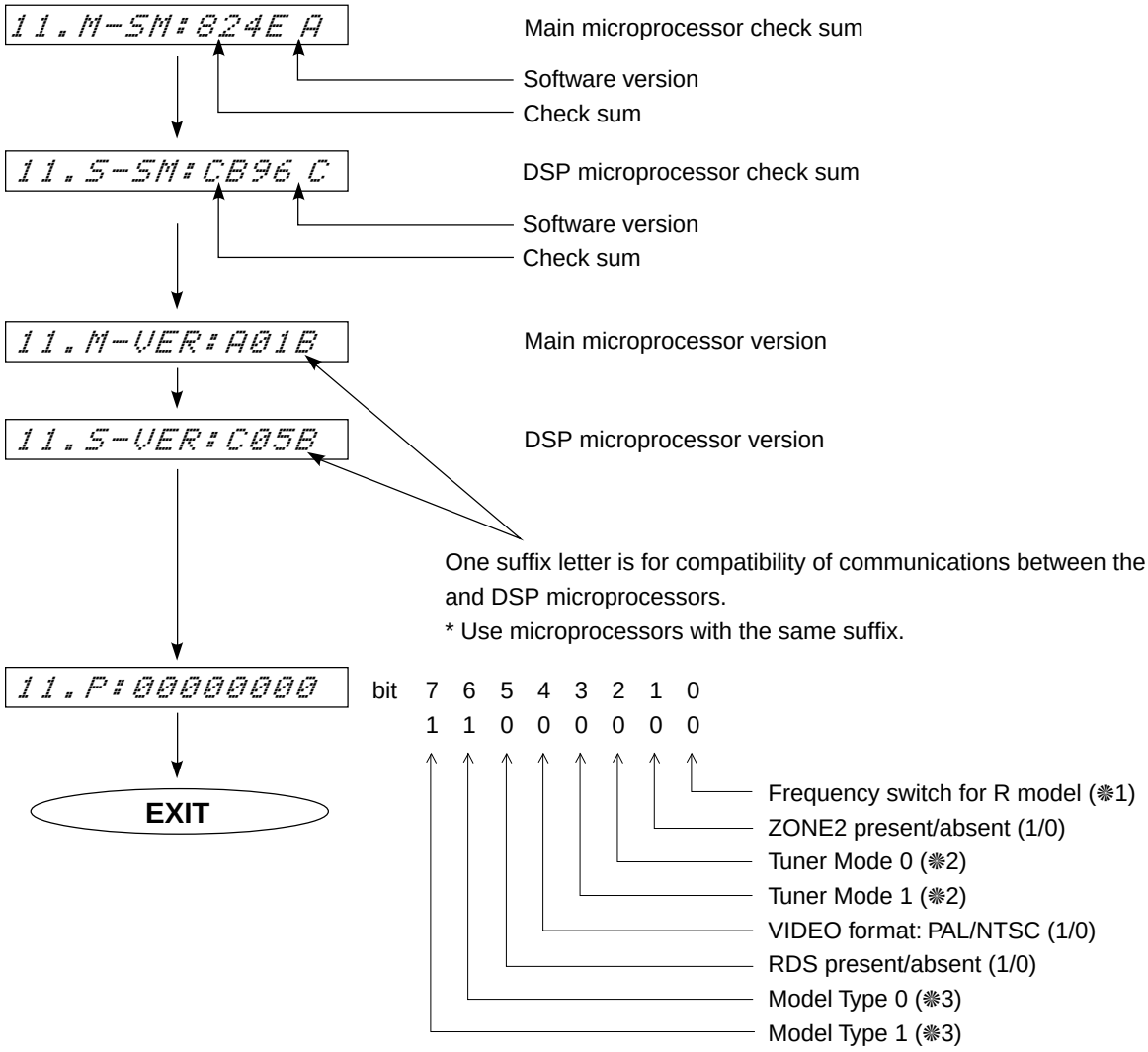
[SUM1/2] Displays the check sum of sub microprocessor program area with ASCII 4 bytes in a hexadecimal number.

[BI0/1/2] Displays the bit stream information contained in Dolby Digital (AC-3)/DTS signal from the first byte.

[BI1-5/1/2] Displays the bit stream information contained in Dolby Digital (AC-3) signal from the fifth byte.

(11) CPU VERSION/CHECK SUM/PORT INFO/EXIT DIAG

The check sum, version and port setting of main CPU/DSP CPU are displayed.
The signal is EFFECT OFF.
Operating the submenu will finish self-diagnosis, and ordinary operation mode will be restored.
The suffix letter ("A" in the following) of version indication is for compatibility of communications between the main and DSP microprocessors.
Combining microprocessors with different suffixes will make normal operation impossible.



✵1

Port 51	AM	FM
Low(0)	530–1710kHz/10kHz	87.5–108MHz/100kHz
Hi(1)	531–1611kHz/9kHz	87.5–108.0MHz/50kHz

✵2

Tuner Mode 1	0	*0	0	*1	1	*2	1	*3
Tuner Mode 0	0		1		0		1	

*0 AM: 531–1611kHz/9kHz FM: 76.0–90.0MHz/100kHz (J model)
*1 AM: 530–1710kHz/10kHz FM: 87.5–107.9MHz/200kHz (U, C models)
*2 AM: 531–1611kHz/9kHz FM: 87.5–108.0MHz/50kHz (A, L models)
*3 R model: Tuner Frequency is selected by Port 51 and Model Type.

✵3

Model Type 1	1	V795a
Model Type 0	1	

■ FACTORY PRESET

All of the system settings are initially set from the factory as follows.

● **INPUT (VIDEO)** DVD/LD (DVD/LD)

● **EFFECT LEVEL**

EFFECT CHANNEL	PRESET VALUE
CENTER	0dB
RIGHT SURROUND	0dB
LEFT SURROUND	0dB
SUB WOOFER	0dB

● **DSP PROGRAM**

INPUT	DSP RROGRAM
PHONO	CONCERT HALL
CD	ROCK CONCERT
TUNER	DISCO
TAPE MONITOR	JAZZ CLUB
DVD/LD	MOVIE THEATER 1 70mm/DGTL/DTS Sci-Fi
TV/DBS	TV/SPORTS
VCR	ENHANCED
VIDEO AUX	PRO LOGIC

● **SET MENU**

No.	SET MENU	PRESET VALUE
1.	CENTER SPEAKER	LRG
2.	REAR SPEAKER	LARGE
3.	MAIN SPEAKER	LARGE
4.	LFE/BASS OUT	SW
5.	MAIN LEVEL	Normal
6.	DOLBY DGTL SET LFE LEVEL	0 dB
7.	DOLBY DGTL SET DYNAMIC RANGE	MAX
8.	DTS SET LFE LEVEL	0 dB
9.	CENTER DELAY	0 ms
10.	PARAMETER INI	——
11.	MEMORY GUARD	OFF
12.	TV/DBS INPUT	AUTO
13.	DIMMER	0

● **PRESET STATIONS**

STATION		FM FACTORY PRESET DATA (MHz)		
PAGE	NO.	U, C	R, L, G, A, B	J
A/C/E	1	87.5	87.50	76.0
	2	90.1	90.10	83.0
	3	95.1	95.10	84.0
	4	98.1	98.10	86.0
	5	107.9	108.00	90.0
	6	88.1	88.10	78.0
	7	106.1	106.10	88.0
	8	107.9	108.00	82.1

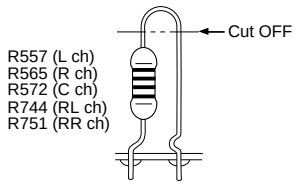
STATION		AM FACTORY PRESET DATA (kHz)	
PAGE	NO.	U, C, R	R, L, G, A, B, J
B/D	1	630	630
	2	1080	1080
	3	1440	1440
	4	530	531
	5	1710	1611
	6	900	900
	7	1350	1350
	8	1400	1404

■ AMP ADJUSTMENTS

● Confirmation of Idling Current

1) No signal applied.
2) Non-loaded condition.
3) Aging is not neccessary.

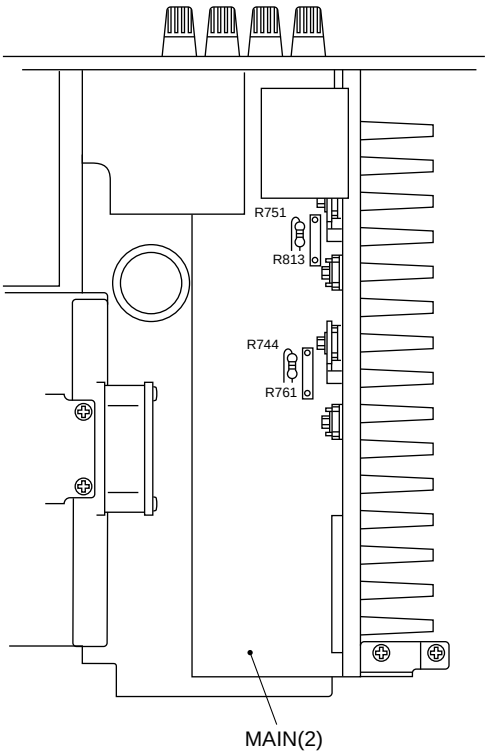
Item	Test Point	Rating (DC)	Note
MAIN L	CB529	0.05mV~1.5mV	If the measured voltage exceeds1.6mV, cut the lead wire of R557(L ch), R565(R ch), R572(C ch), R744(RL ch) or R751(RR ch) and then check again if each measured value satisfies the rating.
MAIN R	CB530		
CENTER	CB531		
REAR L	R761		
REAR R	R813		

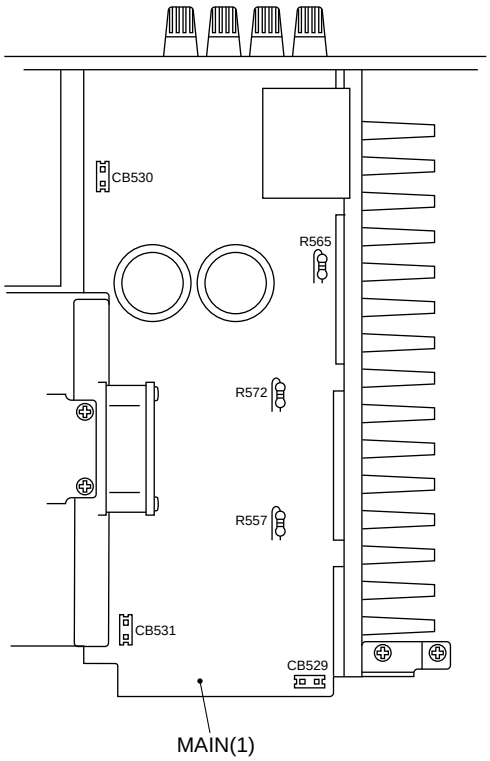


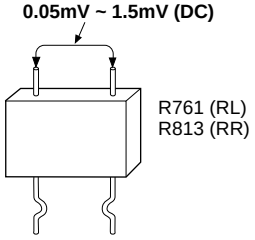
***** Confirm that the voltage at the test points is 7.5mV ~ 12mV after 60 minutes.

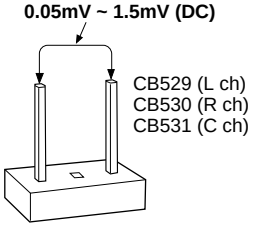
Note)

- If R557(L ch), R565(R ch), R572(C ch), R744(RL ch) or R751(RR ch) have already been cut off and idling current does not flow, reconnect R557(820Ω), R565(820Ω), R572(820Ω), R744(820Ω) or R751(820Ω).
- Q514, Q516, Q518, Q707 and Q710 are transistors for temperature correction. Apply silicone grease to the contact surface with the heat sink.







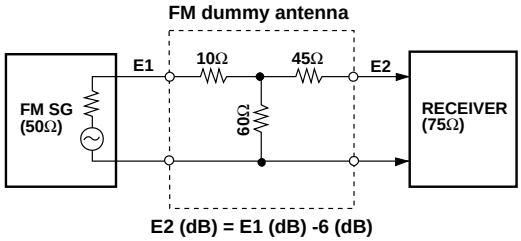


■ TUNER ADJUSTMENTS

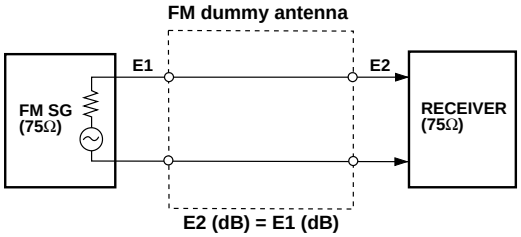
● Measuring Instruments

FM signal generator (FM SG)
Stereo signal generator (SSG)
AM signal generator (AM SG)
Distortion meter (DIST. M)
AC voltmeter (ACVM)
DC voltmeter (DCVM)
Oscilloscope
Low pass filter (YLF-15, fc=15kHz)
Oscillator

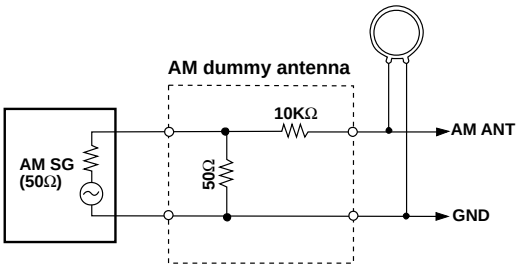
● Dummy antenna



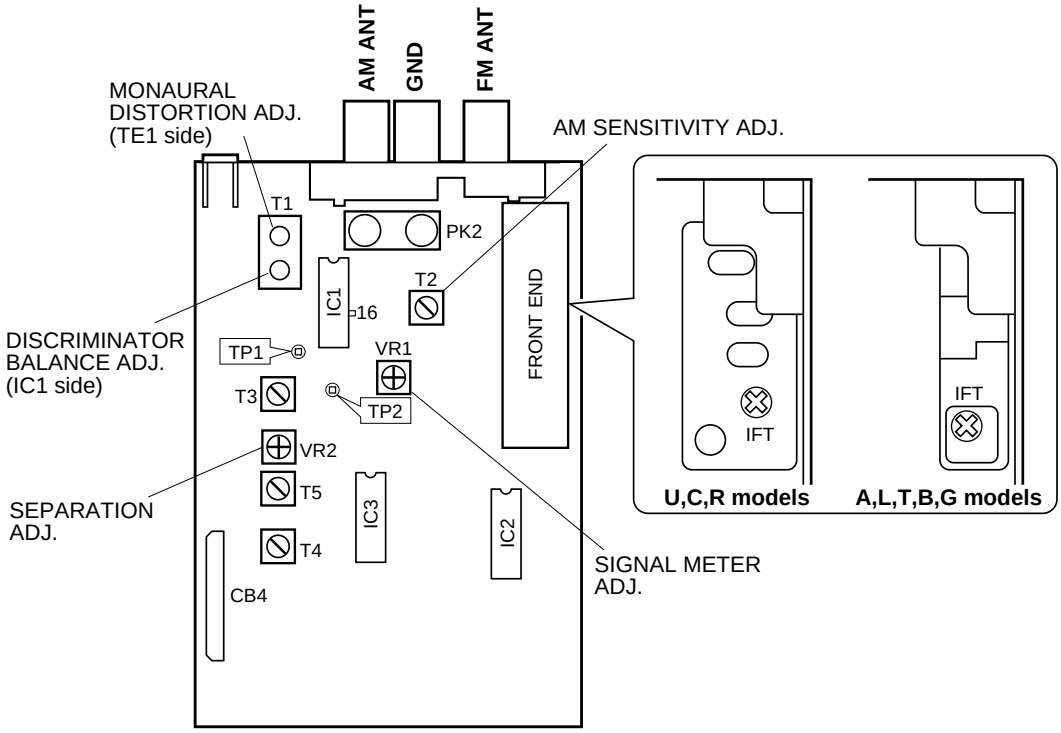
E2 (dB) = E1 (dB) -6 (dB)



E2 (dB) = E1 (dB)



● Test point



FM Adjustment

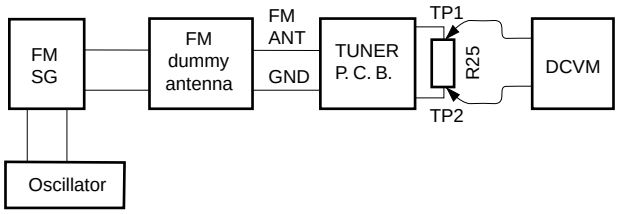
● Before Adjustment

1) For dB, 1μV=0dBμ
   Example : 60dBμ=1mV
2) 100% modulation means that the frequency deviation is ± 75kHz.
3) Install the Matching Transformer and connect FM SG.
4) Set each switch to the following position unless otherwise specified.

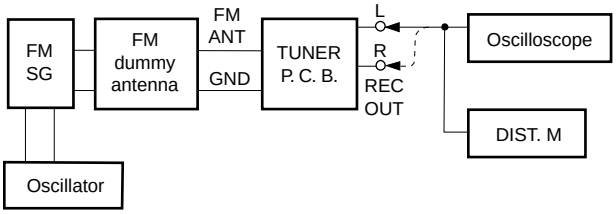
INPUT SELECTOR ..... TUNER
TUNING MODE ..... AUTO

● Connection diagram (Measuring instruments)

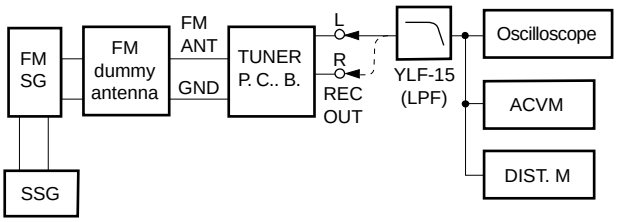
1) Discriminator balance adjustment



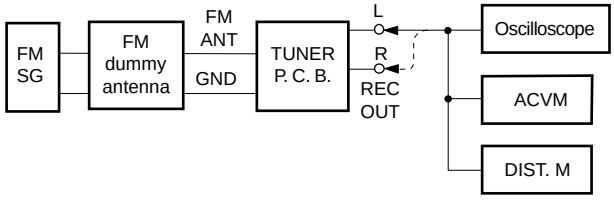
2) Monaural distortion adjustment



3) Stereo distortion adjustment/separation adjustment



4) Sensitivity Verification



Step	Adjustment item	Signal (ANT IN)	Reception frequency	Adjustment point	Test point	Rating
1	Rough adjustment of discriminator balance	FM ANT (75Ω) 98.1MHz ** 70dBμ MONO 100Hz 100% modulation	98.1MHz * (A-4)	T1 (IC1 side core)	Both ends of R25 (Between TP1 and TP2)	DC 0V±100mV
2	Rough adjustment of monaural distortion	Same as Step 1.	98.1MHz * (A-4)	T1 (TE1 side core)	REC OUT L, R	Minimize the distortion.
3	Fine adjustment of discriminator balance	Same as Step 1.	98.1MHz * (A-4)	T1 (IC1 side core)	Both ends of R25 (Between TP1 and TP2)	DC 0V±50mV
4	Fine adjustment of monaural distortion	Same as Step 1.	98.1MHz * (A-4)	T1 (TE1 side core)	REC OUT L, R	Minimize the distortion (to 43dB or less).
5	Verification of discriminator balance	Same as Step 1.	98.1MHz * (A-4)	T1 (IC1 side core)	Both ends of R25 (Between TP1 and TP2)	DC 0V±50mV

*** :** Execution of FACTORY PRESET (Refer to page 16.) will facilitate setting reception frequency for adjustment.

****** Must be 98.1MHz ± 5kHz

See page 22 for TP locations & adjustment points.

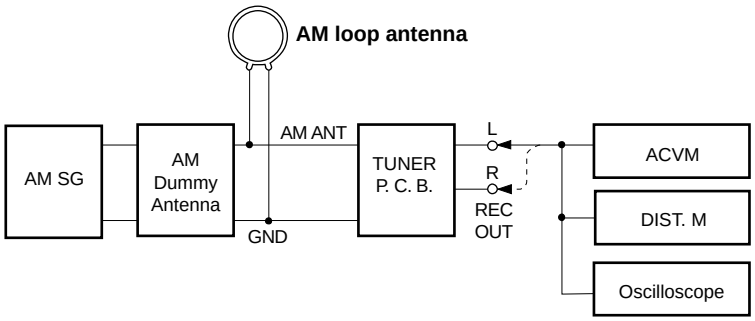
Step	Adjustment item	Signal (ANT IN)	Reception frequency	Adjusted point	Test point	Rating
6	Adjustment of front end IFT	FM ANT (75Ω) 98.1MHz 70dBμ MONO 1kHz, 100% modulation	98.1MHz * (A-4)	Front end IFT	Pin 16 of IC1	Adjust so that the DC voltage is maximum. **CAUTION :** Over-adjustment of the IFT core will reduce the sensitivity. Maximum ±90°
7	Verification of monaural distortion	FM ANT (75Ω) 98.1MHz 70dBμ MONO 1kHz, 100% modulation	98.1MHz * (A-4)		REC OUT L, R	0.1%
8	Verification of stereo distortion	FM ANT (75Ω) 98.1MHz 70dBμ Stereo L or R 1kHz, 100% modulation	98.1MHz * (A-4) * Tuning mode should be AUTO.		REC OUT L, R	0.2% • STEREO indicator should light.
9	Verification of sensitivity	FM ANT (75Ω) 88.1MHz 98.1MHz 106.1MHz MONO 1kHz Modulation off	88.1MHz * (A-6) 98.1MHz * (A-4) 106.1MHz * (A-7)		ANT (75Ω)	1) Set the tuning mode to MAN'L MONO. (Muting OFF) 2) S/N should be 30dB at each frequency of 88.1MHz, 98.1MHz, and 106.1MHz. 3) Check to ensure that the voltage at the ANT terminal is 5μV or less. (A, L, B, G only : 7μV or less)
10	Adjustment of Separation	FM ANT (75Ω) 98.1MHz 70dBμ Stereo L or R 1kHz, 100% modulation	98.1MHz * (A-4)	VR2	REC OUT L, R	With SSG output at L or R, the signal leakage level at the other channel should be minimized. 48dB or more
11	Adjustment of Signal meter	FM ANT (75Ω) 98.1MHz 45dBμ MONO 1kHz 30% modulation	98.1MHz * (A-4)	VR1		Adjust so that all segments light.
		–10dBμ or less				Check to ensure that all segments are OFF.
12	Verification of auto tuning	FM ANT (75Ω) 98.1MHz 26dBμ Stereo L or R 1kHz, 30% modulation	98.1MHz * (A-4)			• Automatic reception should be available when the tuning key is moved UP and DOWN. • The stereo indicator should light. • Audio muting should be applied during tuning.

*** :** Execution of FACTORY PRESET (Refer to page 16.) will facilitate setting reception frequency for adjustment.

AM Adjustment (This should be done after FM adjustment.)

● Connection Diagram (Measuring instruments)

1) Adjustment of sensitivity



See page 22 for TP locations & adjustment points.

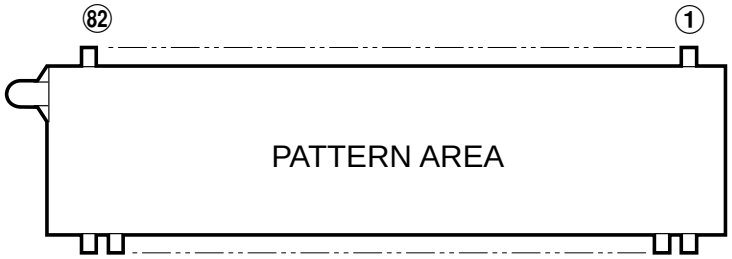
Step	Adjustment item	Signal (ANT IN)	Reception frequency	Adjustment point	Test point	Rating
1	Adjustment of sensitivity	AM ANT 630kHz 50dBμ 1kHz 30% modulation	630kHz * (B-1)	T2	REC OUT	Audio output should be maximized. Repeat steps 1 and 2.
2	Verification of sensitivity	AM ANT 630kHz 1080kHz 1440kHz 30% modulation	630kHz * (B-1) 1080kHz * (B-2) 1440kHz * (B-3)		REC OUT	Check to ensure that the voltage at the ANT terminal is 54dBμ or less.
3	Verification of signal meter	AM ANT 1080kHz 90dBμ MONO 1kHz 30% modulation	1080kHz * (B-2)			All S-meters should light.
		–10dBμ or less				All S-meters should turn off.
4	Verification of auto tuning	AM ANT 60dBμ				Auto reception should be available when the tuning key is moved UP and DOWN. Audio must be muted during search.

*** :** Execution of FACTORY PRESET (Refer to page 16.) will facilitate setting reception frequency for adjustment.

RX-V795a/RDS
HTR-5170

■ DISPLAY DATA (V2573800)

● V101 : 16-BT-60GK



● PIN CONNECTION

Pin No.	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64
Connection	F2	F2	NP	NP	NC	NC	P37	P36	P35	P34	P33	IC	NP	Fd	Fd	NP	IC	P32	P31

Pin No.	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45
Connection	P30	P29	P28	P27	P26	P25	P24	P23	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12

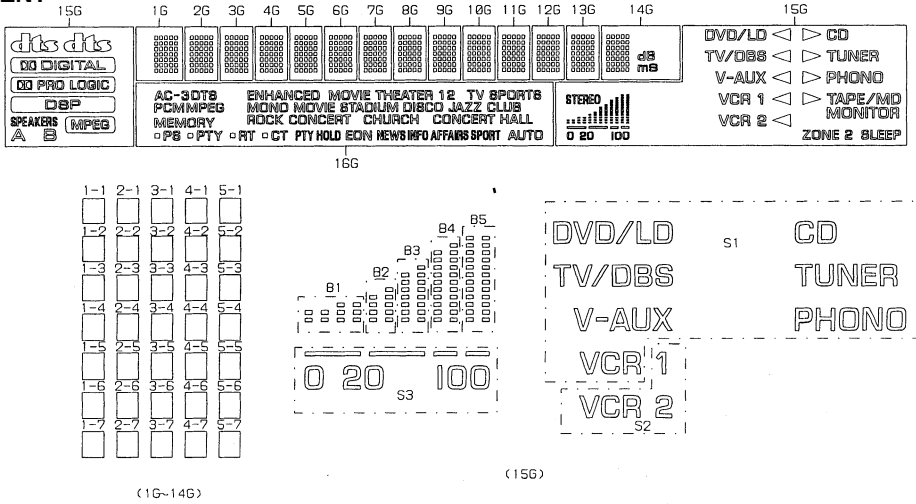
Pin No.	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Connection	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	16G	15G	14G	13G	12G	11G	10G	9G

Pin No.	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7
Connection	8G	7G	6G	5G	4G	3G	2G	1G	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

Pin No.	6	5	4	3	2	1
Connection	NC	NC	NP	NP	F1	F1

Note 1) F1, F2 ..... Filament
2) NP ..... No Pin
3) NC ..... No Connection
4) P1~P37 ..... Datum Line
5) 1G~16G ..... Grid
6) IC ..... Internal connection

● GRID ASSIGMENT



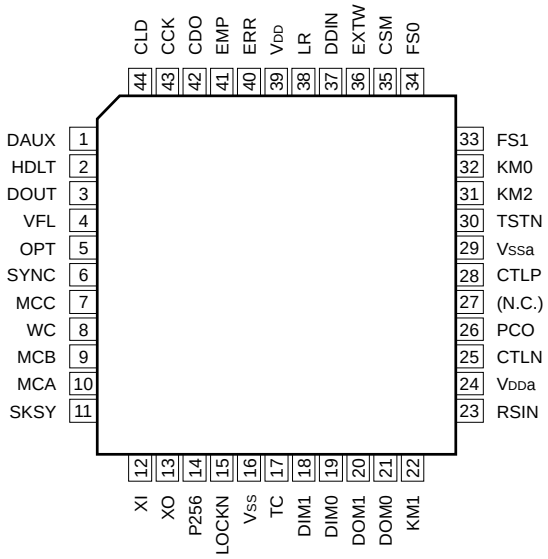
● ANODE CONNECTION

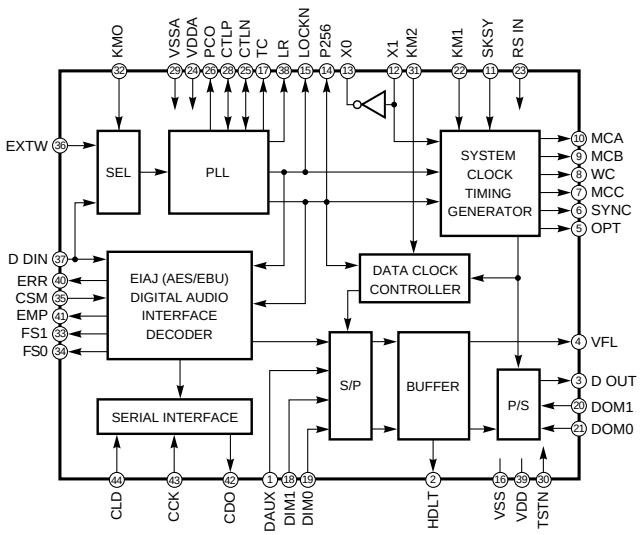
	16G	15G	14G	13G~1G
P1	AC-3	dts (LEFT)	1-1	1-1
P2	DTS	dts (RIGHT)	2-1	2-1
P3	PCM	DIGITAL	3-1	3-1
P4	MPEG	PRO LOGIC	4-1	4-1
P5	ENHANCED	DSP	5-1	5-1
P6	MOVIE THEATER	MPEG	1-2	1-2
P7	1	SPEAKERS	2-2	2-2
P8	2	A	3-2	3-2
P9	TV SPORTS	B	4-2	4-2
P10	MONO MOVIE	▷ (TAPE/MD)	5-2	5-2
P11	STADIUM	▷ (PHONO)	1-3	1-3
P12	DISCO	▷ (TUNER)	2-3	2-3
P13	JAZZ CLUB	▷ (CD)	3-3	3-3
P14	ROCK CONCERT	◁ (DVD/LD)	4-3	4-3
P15	CHURCH	◁ (TV/DBS)	5-3	5-3
P16	CONCERT HALL	◁ (V-AUX)	1-4	1-4
P17	–	◁ (VCR1)	2-4	2-4
P18	–	◁ (VCR2)	3-4	3-4
P19	–	S1	4-4	4-4

	16G	15G	14G	13G~1G
P20	MEMORY	S2	5-4	5-4
P21	□ (PS)	TAPE/MD	1-5	1-5
P22	PS	MONITOR	2-5	2-5
P23	□ (PTY)	ZONE 2	3-5	3-5
P24	PTY	SLEEP	4-5	4-5
P25	□ (RT)	–	5-5	5-5
P26	RT	–	1-6	1-6
P27	□ (CT)	–	2-6	2-6
P28	CT	–	3-6	3-6
P29	PTY HOLD	STEREO	4-6	4-6
P30	EON	B1	5-6	5-6
P31	NEWS	B2	1-7	1-7
P32	INFO	B3	2-7	2-7
P33	AFFAIRS	B4	3-7	3-7
P34	SPORT	B5	4-7	4-7
P35	AUTO	S3	5-7	5-7
P36	–	–	dB	–
P37	–	–	mS	–

■ IC DATA

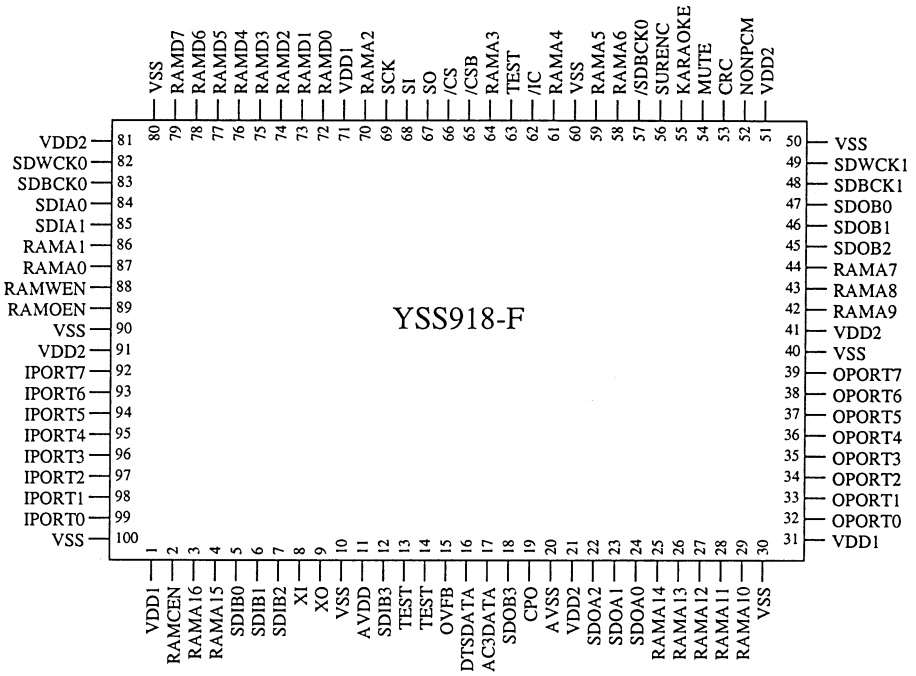
IC3 : YM3436DK
DIR (Digital Format Interface Receiver)

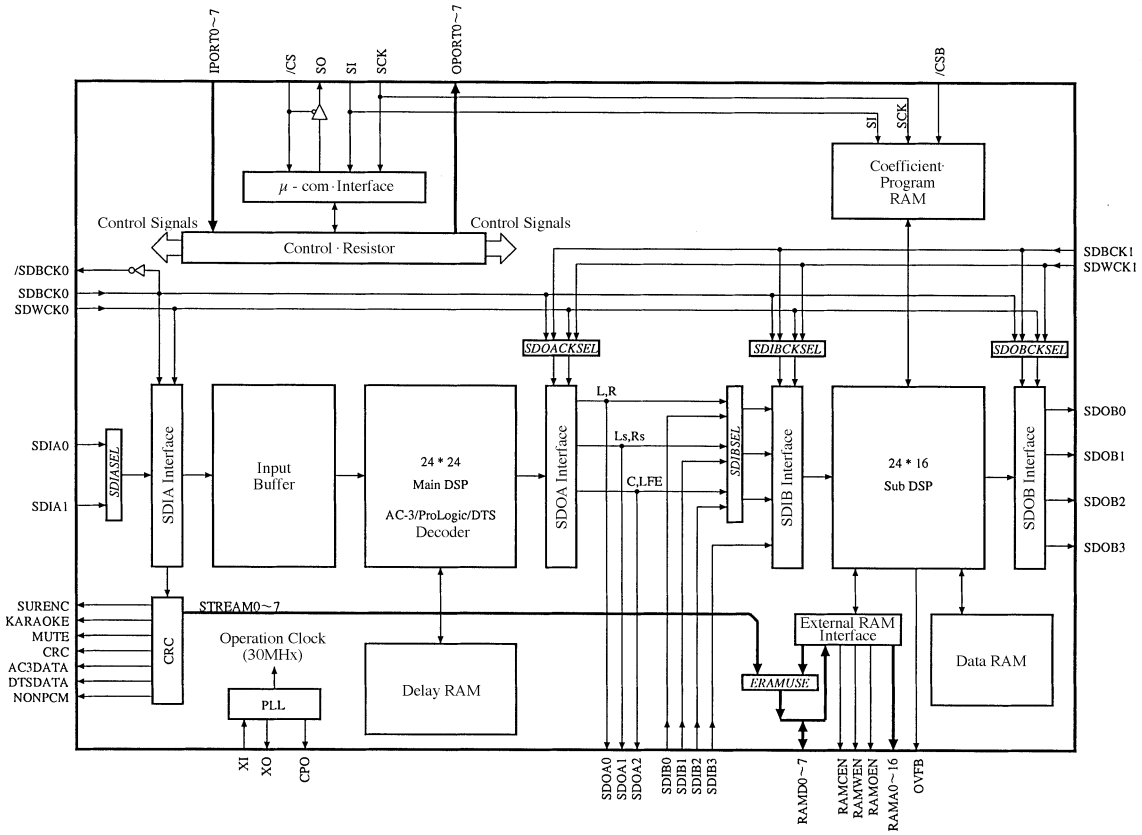




Pin No.	Pin Name	I/O	Function	Pin No.	Pin Name	I/O	Function
1	DAUX	I	Auxiliary input for audio data	**26**	PCO	O	PLL phase comparison output
2	HDLT	O	Asynchronous buffer operation flag	**27**	(NC)		
3	DOUT	O	Audio data output	**28**	CTLP	I	VCO control input P
4	VFL	O	Parity flag output	**29**	VSSa		VCO section power (GND)
5	OPT	O	Fs x 1 Synchronous output signal for DAC	**30**	TSTN	I	Test terminal. Open for normal use
6	SYNC	O	Fs x 1 Synchronous output signal for DSP	**31**	KM2	I	Clock mode switching input 2
7	MCC	O	Fs x 64Bit clock output	**32**	KM0	I	Clock mode switching input 0
8	WC	O	Fs x 1Word clock output	**33**	FS1	O	Channel status sampling frequency display output 1
9	MCB	O	Fs x 128Bit clock output				
10	MCA	O	Fs x 256Bit clock output	**34**	FS0	O	Channel status sampling frequency display output 0
11	SKSY	I	Clock synchronization control input				
12	XI	I	Crystal oscillator connection or external clock input	**35**	CSM	I	Channel status output method selection
				36	EXTW	I	External synchronous auxiliary input word clock
13	XO	O	Crystal oscillator connection				
14	P256	O	VCO oscillator clock connection	**37**	DDIN	I	EIAJ (AES/EBU) data input
15	LOCKN	O	PLL lock flag	**38**	LR	O	PLL word clock output
16	VSS		Logic section power (GND)	**39**	VDD		Logic section power (+5V)
17	TC	O	PLL time constant switching output	**40**	ERR	O	Data error flag output
18	DIM1	I	Data input mode selection	**41**	EMP	O	Channel status emphasis control code output
19	DIM0	I	Data input mode selection				
20	DOM1	I	Data output mode selection	**42**	CDO	O	3-wire type microcomputer interface data output
21	DOM0	I	Data output mode selection				
22	KM1	I	Clock mode switching input 1	**43**	CCK	I	3-wire type microcomputer interface clock output
23	RSTN	I	System reset input				
24	VDDa		VCO section power (+5V)	**44**	CLD	I	3-wire type microcomputer interface load input
25	CTLN	I	VCO control input N				

IC4 : YSS918-F
Digital Pro-Logic Decoder





IC4 : YSS918-F
Digital Pro-Logic Decoder

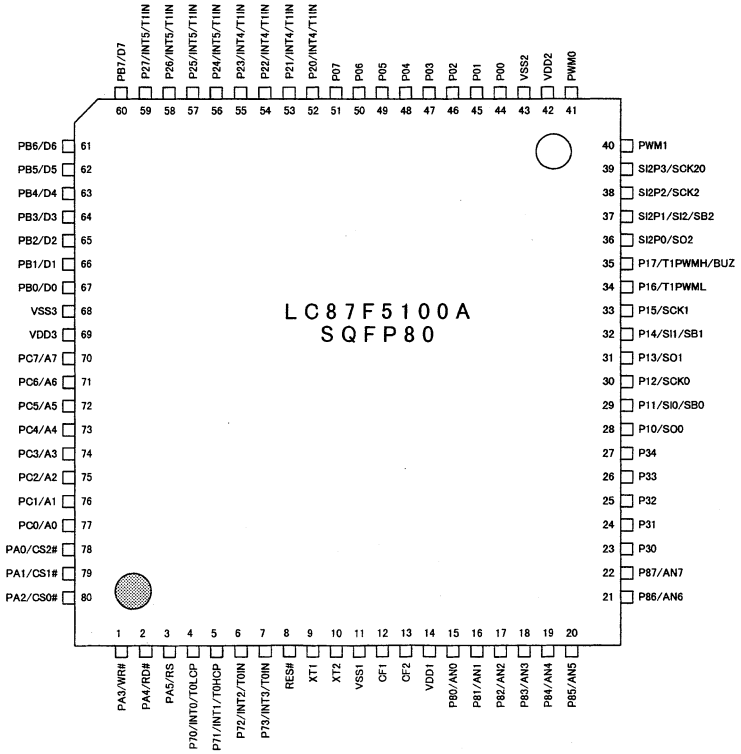
No.	Name	I/O	Function
1	VDD1		+5V terminal (for terminal section)
2	RAMCEN	O	Chip enable terminal for external SRAM
3	RAMA16	O	Address terminal 16 for external SRAM
4	RAMA15	O	Address terminal 15 for external SRAM
5	SDIB0	Itp	PCM input terminal 0 to Sub DSP
6	SDIB1	Itp	PCM input terminal 1 to Sub DSP
7	SDIB2	Itp	PCM input terminal 2 to Sub DSP
8	XI	Ic	Crystal oscillator connecting terminal (12.288MHz)
9	XO	O	Crystal oscillator connecting terminal
10	VSS		Ground terminal (for terminal section)
11	AVDD		+3.3V terminal (for PLL circuit)
12	SDIB3	Itp	PCM input terminal 3 to Sub DSP
13	TEST		Test terminal (normally unconnected)
14	TEST		Test terminal (normally unconnected)
15	OVFB	O	Sub DSP overflow detect terminal
16	DTSDATA	O	DTS data detect terminal
17	AC3DATA	O	AC-3 data detect terminal
18	SDOB3	O	PCM output terminal for Sub DSP
19	CPO	A	PLL output terminal, connected to external analog filter
20	AVSS		Ground terminal (for PLL circuit)
21	VDD2		+3.3V terminal (for inner circuit)
22	SDOA2	O	PCM output terminal (AC-3/DTS : C/LFE output, Pro Logic : C/S output)
23	SDOA1	O	PCM output terminal (AC-3/DTS : LS/RS output, Pro Logic : Lt/Rt output)
24	SDOA0	O	PCM output terminal (AC-3/DTS/Pro Logic : L/R output)
25	RAMA14	O	Address terminal 14 for external SRAM
26	RAMA13	O	Address terminal 13 for external SRAM
27	RAMA12	O	Address terminal 12 for external SRAM
28	RAMA11	O	Address terminal 11 for external SRAM
29	RAMA10	O	Address terminal 10 for external SRAM
30	VSS		Ground terminal (for inner circuit)
31	VDD1		+5V terminal (for terminal section)
32	OPORT0	O	General purpose output terminal
33	OPORT1	O	General purpose output terminal
34	OPORT2	O	General purpose output terminal
35	OPORT3	O	General purpose output terminal
36	OPORT4	O	General purpose output terminal
37	OPORT5	O	General purpose output terminal
38	OPORT6	O	General purpose output terminal
39	OPORT7	O	General purpose output terminal
40	VSS		Ground terminal (for inner circuit)
41	VDD2		+3.3V terminal (for inner circuit)
42	RAMA9	O	Address terminal 9 for external SRAM
43	RAMA8	O	Address terminal 8 for external SRAM
44	RAMA7	O	Address terminal 7 for external SRAM
45	SDOB2	O	PCM output terminal for Sub DSP
46	SDOB1	O	PCM output terminal for Sub DSP
47	SDOB0	O	PCM output terminal for Sub DSP
48	SDBCK1	Itp	Bit clock input terminal for SDOA/SDIB/SDOB signal
49	SDWCK1	Itp	Word clock input terminal for SDOA/SDIB/SDOB signal
50	VSS		Ground terminal (for terminal section)
51	VDD2		+3.3V terminal (for inner circuit)

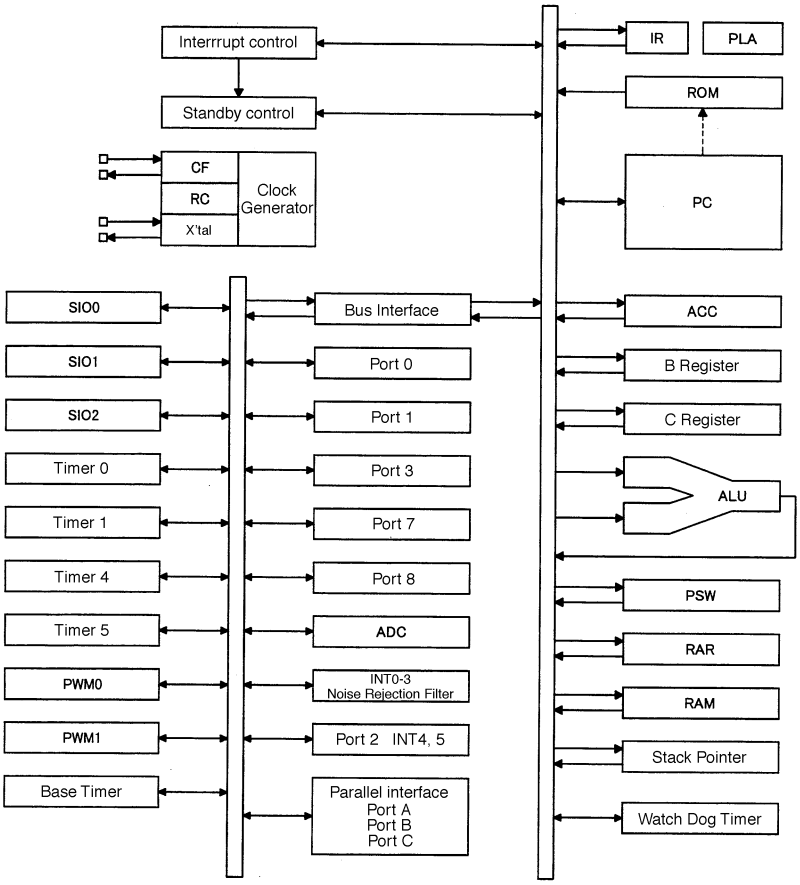
IC4 : YSS918-F
Digital Pro-Logic Decoder

No.	Name	I/O	Function
52	NONPCM	O	non-PCM data detect terminal
53	CRC	O	AC-3 CRC error detect terminal
54	MUTE	O	Auto mute detect terminal
55	KARAOKE	O	AC-3 karaoke data detect terminal
56	SURENC	O	AC-3 2/0 mode dolby surround encode input detect terninal
57	/SDBCK0	O	SDBCK0 inverted clock output terminal
58	RAMA6	O	Address terminal 6 for external SRAM
59	RAMA5	O	Address terminal 5 for external SRAM
60	VSS		Ground terminal (for inner circuit)
61	RAMA4	O	Address terminal 4 for external SRAM
62	/IC	Ics	Initial clear terminal
63	TEST		Test terminal (normally unconnected)
64	RAMA3	O	Address terminal 3 for external SRAM
65	/CSB	Itsp	Chip select input terminal for Sub DSP
66	/CS	Its	Microprocessor interface chip select input terminal
67	SO	O*	Microprocessor interface data output terminal
68	SI	Its	Data input terminal for microprocessor interface and Sub DSP
69	SCK	Its	Clock input terminal for microprocessor interface and Sub DSP
70	RAMA2	O	Address terminal 2 for external SRAM
71	VDD1		+5V terminal (for terminal section)
72	RAMD0	Itp/O	Data terminal for external SRAM(external SRAM non-used : STERAM0 output)
73	RAMD1	Itp/O	Data terminal for external SRAM(external SRAM non-used : STERAM1 output)
74	RAMD2	Itp/O	Data terminal for external SRAM(external SRAM non-used : STERAM2 output)
75	RAMD3	Itp/O	Data terminal for external SRAM(external SRAM non-used : STERAM3 output)
76	RAMD4	Itp/O	Data terminal for external SRAM(external SRAM non-used : STERAM4 output)
77	RAMD5	Itp/O	Data terminal for external SRAM(external SRAM non-used : STERAM5 output)
78	RAMD6	Itp/O	Data terminal for external SRAM(external SRAM non-used : STERAM6 output)
79	RAMD7	Itp/O	Data terminal for external SRAM(external SRAM non-used : STERAM7 output)
80	VSS		Ground terminal (for terminal section)
81	VDD2		+3.3V terminal (for inner circuit)
82	SDWCK0	It	Word clock input terminal for SDIA/SDOA/SDIB/SDOB signal
83	SDBCK0	It	Bit clock input terminal for SDIA/SDOA/SDIB/SDOB signal
84	SDIA0	It	AC-3/DTS bit stream (or PCM) data input terminal to main DSP
85	SDIA1	It	AC-3/DTS bit stream (or PCM) data input terminal to main DSP
86	RAMA1	O	Address terminal 1 for external SRAM
87	RAMA0	O	Address terminal 0 for external SRAM
88	RAMWEN	O	Write enable terminal for external SRAM
89	RAMOEN	O	Output enable terminal for external SRAM
90	VSS		Ground terminal
91	VDD2		+3.3V terminal (for inner circuit)
92	IPORT7	Itp	General purpose input terminal
93	IPORT6	Itp	General purpose input terminal
94	IPORT5	Itp	General purpose input terminal
95	IPORT4	Itp	General purpose input terminal
96	IPORT3	Itp	General purpose input terminal
97	IPORT2	Itp	General purpose input terminal
98	IPORT1	Itp	General purpose input terminal
99	IPORT0	Itp	General purpose input terminal
100	VSS		Ground terminal

Ic : CMOS level input terminal
It : TTL level input terminal
Is : Schmidt trigger input terminal
Ip : Built-in pull up resistance
O : Digital output terminal
O* : 3-state digital output terminal
A : Analog terminal

IC14 : LC87F5164A
Sub μ-Com



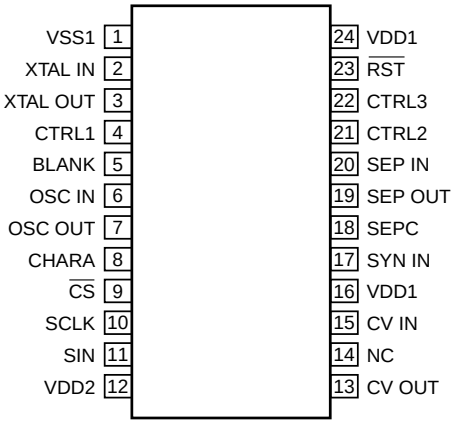


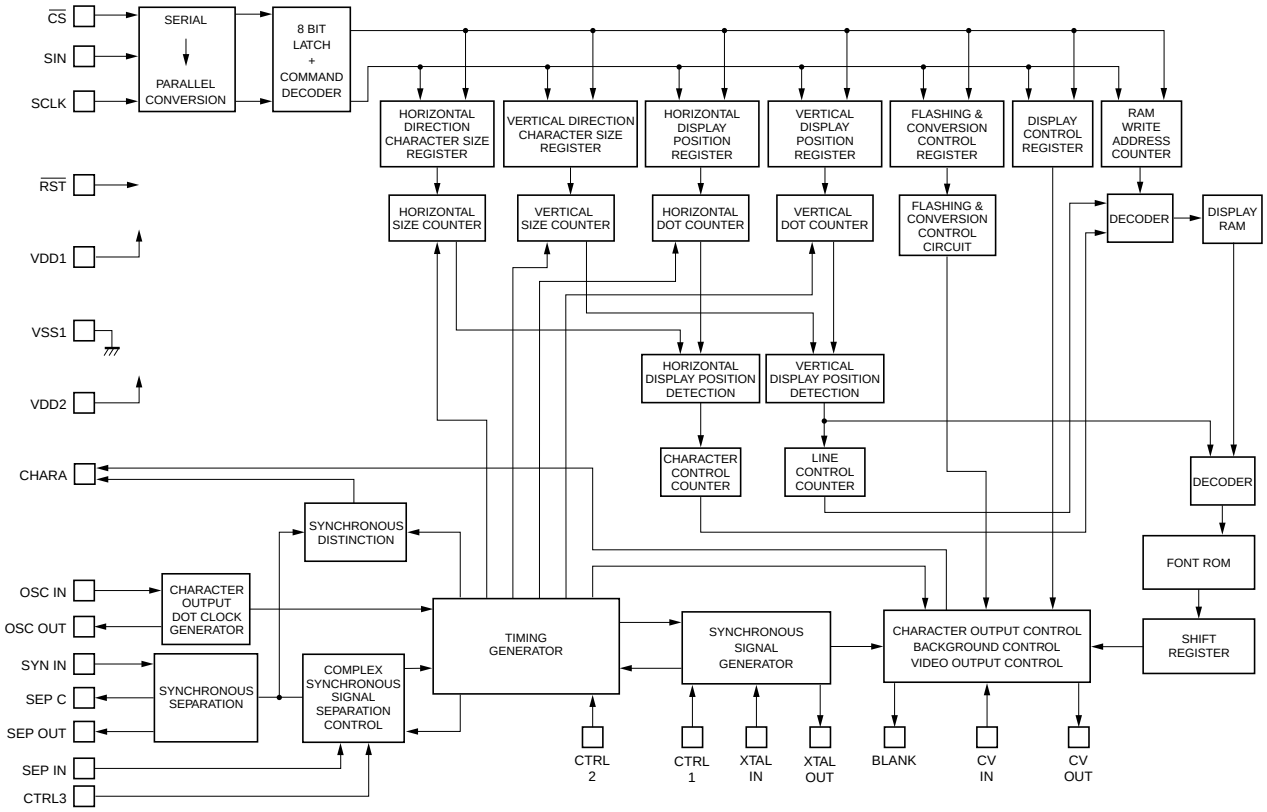
IC14 : LC87F5164A
Sub μ-Com

No.	Name	I/O	Function
1	PA3/$\overline{WR}$	I/O	Parallel interface output $\overline{WR}$
2	PA4/$\overline{RD}$	I/O	Parallel interface output $\overline{RD}$
3	PA5/RS	I/O	Parallel interface output RS
4	P70/INT0/T0LCP	I/O	INT0 input/HOLD release input/ Timer0L capture input/Output for watchdog timer
5	P71/INT1/T0HCP	I/O	INT1 input/HOLD release input/ Timer0H capture input
6	P72/INT2/T0IN	I/O	INT2 input/HOLD release input/Timer0 event input/Timer0L capture input
7	P73/INT3/T0IN	I/O	INT3 input (noise rejection filter attached input)/Timer 0 event input/ Timer0H capture input
8	$\overline{RES}$	I	Reset terminal
9	XT1	I	Input for 32.768kHz crystal oscillator
10	XT2	I/O	Output for 32.768kHz crystal oscillator
11	VSS1		Negative power supply
12	CF1	I	Input terminal for ceramic oscillator
13	CF2	O	Output terminal for ceramic oscillator
14	VDD1		Positive power supply
15	P80/AN0	I/O	AD Input port
16	P81/AN1		
17	P82/AN2		
18	P83/AN3		
19	P84/AN4		
20	P85/AN5		
21	P86/AN6		
22	P87/AN7		
23	P30	I/O	5-bits Input/Output port
24	P31		
25	P32		
26	P33		
27	P34		
28	P10/S00	I/O	SI00 data output
29	P11/SI0/SB0	I/O	SI00 data input/bus input/output
30	P12/SCK0	I/O	SI00 clock input/output
31	P13/SO1	I/O	SI01 data output
32	P14/SI1/SB1	I/O	SI01 data input/bus input/output
33	P15/SCK1	I/O	SI01 clock input/output
34	P16/T1PWML	I/O	Timer 1PWML output
35	P17/T1PWMH/BUZ	I/O	Timer 1 PWMH output/Buzzer output
36	SI2P0/S02	I/O	SI02 data output
37	SI2P1/SI2/SB2	I/O	SI02 data output/bus input/output

No.	Name	I/O	Function
38	SI2P2/SCK2	I/O	SI02 clock input/output
39	SI2P3/SCK20	I/O	SI02 clock output
40	PWM1	O	PWM1 output port
41	PWM0	O	PWM0 output port
42	VDD2		Positive power supply
43	VSS2		Negative power supply
44	P00	I/O	8-bits Input/Output port
45	P01		
46	P02		
47	P03		
48	P04		
49	P05		
50	P06		
51	P07		
52	P20/INT4/T1IN	I/O	INT4 input/HOLD release input/ Timer 1 event input/Timer 0L capture input /Timer 0H capture input
53	P21/INT4/T1IN		
54	P22/INT4/T1IN		
55	P23/INT4/T1IN		
56	P24/INT5/T1IN	I/O	INT5 input/HOLD release input/ Timer 1 event input/Timer 0L capture input /Timer 0H capture input
57	P25/INT5/T1IN		
58	P26/INT5/T1IN		
59	P27/INT5/T1IN		
60	PB7/D7	I/O	Parallel interface data input/output; address output
61	PB6/D6		
62	PB5/D5		
63	PB4/D4		
64	PB3/D3		
65	PB2/D2		
66	PB1/D1		
67	PB0/D0		
68	VSS3		Negative power supply
69	VDD3		Positive power supply
70	PC7/A7	I/O	Parallel interface address output
71	PC6/A6		
72	PC5/A5		
73	PC4/A4		
74	PC3/A3		
75	PC2/A2		
76	PC1/A1		
77	PC0/A0		
78	PA0/$\overline{CS2}$	I/O	Parallel interface output $\overline{CS2}$
79	PA1/$\overline{CS1}$	I/O	Parallel interface output $\overline{CS1}$
80	PA2/$\overline{CS0}$	I/O	Parallel interface output $\overline{CS0}$

IC406 : LC74781-9626
Superimpose

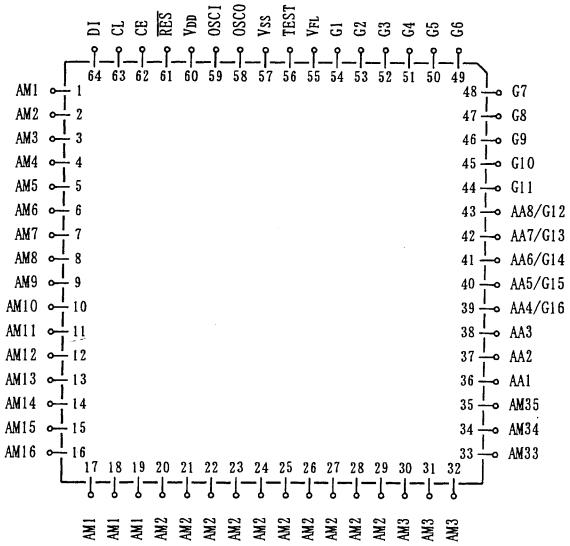


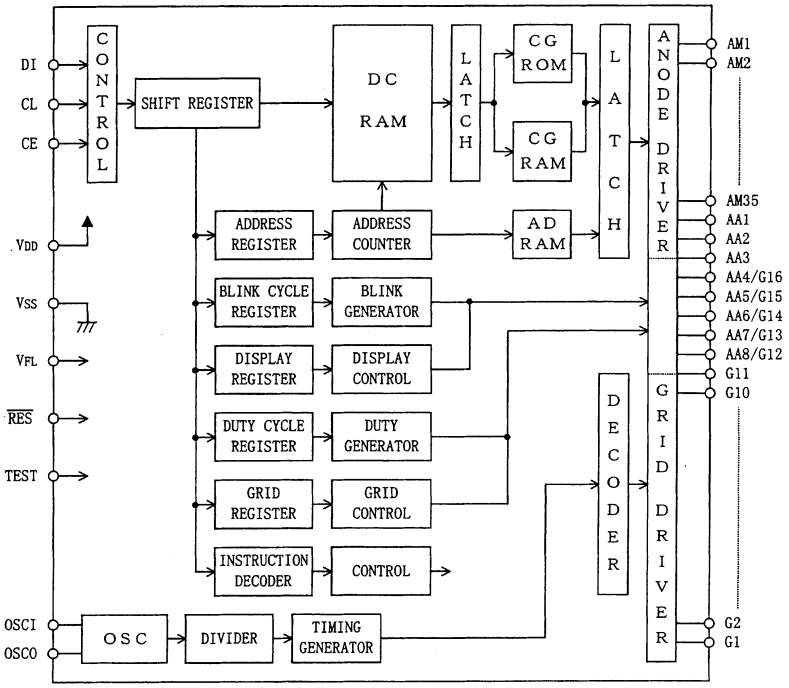


IC406 : LC74781-9626
Superimpose

Pin No.	Symbol	Terminal name	Function
1	VSS1	Ground terminal	Connection to GND (Digital system ground terminal)
2	XTAL IN	Crystal oscillation terminal	Terminal to connect the crystal of the crystal oscillator for internal synchronous signal generation and a capacitor or to input an external clock. (2fsc or 4fsc)
3	XTAL OUT		
4	CTRL1	Crystal oscillation input switching terminal	Switching terminal between the mode to input a clock externally and the mode for crystal oscillation. [L] = Crystal oscillation, [H] = External clock input
5	BLANK	Blank output terminal	Terminal to output the blank signal (character and bordering OR signal) (MOD0 : complex synchronous signal output at [H]). When resetting (RST terminal = [L]), a crystal oscillation clock is output (but not when resetting by the command).
6	OSC IN	LC oscillation terminal	Terminal to connect the coil of the oscillator for character output dot clock generation and a capacitor.
7	OSC OUT		
8	CHARA	Character output terminal	Terminal to output a character signal (MOD0 : It becomes an output terminal to judge the external synchronous signal at [H] and outputs the result after judging existence of the external synchronous signal. When a synchronous signal exists, [H] is output.) When resetting (RST terminal = [L]), a dot clock (LC oscillation) is output (but it is not output when reset by the command.)
9	/CS	Enable input terminal	Serial data input enable input terminal. The serial data input becomes enable at [L]. A pull-up resistor is built in (hysteresis input).
10	SCLK	Clock input terminal	Input terminal of clock for serial data input. A pull-up resistor is built in (hysteresis input).
11	SIN	Data input terminal	Serial data input terminal. A pull-up resistor is built in (hysteresis input).
12	VDD2	Power supply terminal	Power supply terminal for complex image signal level adjustment (Power supply for analog system)
13	CV OUT	Video signal output terminal	Output terminal for complex image signal.
14	NC		Connected to GND or unconnected.
15	CV IN	Video signal input terminal	Input terminal for complex image signal.
16	VDD1	Power supply terminal	Power supply terminal (+5V : power supply for digital system)
17	SYN IN	Synchronous separation circuit input terminal	Video signal input terminal of the built-in synchronous separation circuit (When the built-in synchronous separation circuit is not used, it becomes a horizontal synchronous signal input or a complex synchronous signal input.)
18	SEP C	Synchronous separation circuit bias voltage terminal	Terminal to monitor built-in synchronous separation circuit bias voltage.
19	SEP OUT	Complex synchronous signal output terminal	Terminal to output a complex synchronous signal of built-in synchronous separation circuit ([H] when internally synchronized at MOD1 : [H], [L] output when externally synchronized) (When the built-in synchronous separation circuit is not used, SYNIN input signal is output.)
20	SEP IN	Vertical synchronous signal input terminal	Terminal to input a vertical synchronous signal by integrating the output signal of SEPOUT terminal. Connect the integration circuit between SEPOUT terminals. Fix it to VDD1 when not used.
21	CTRL2	NTSC/PAL-M switching input terminal	Pin setting has a priority over switching of NTSC/PAL/PAL-M/PAL-N method. The NTSC method is selected after [L]= reset. NTSC/PAL/PAL-M/PAL-N method setting by a command is effective. [H] = PAL-M method.
22	CTRL3	SEPIN input control terminal	Terminal to control whether or not to input VSYNC signal into SEPIN input terminal. [L] = VSYNC inputted, [H] = VSYNC not inputted.
23	/RST	Reset input terminal	System reset input terminal. A pull-up resistor is built in (hysteresis input).
24	VDD1	Power supply terminal (+5V)	Power supply terminal (+5V : power supply for digital system)

IC102 : LC75712E
Display Driver

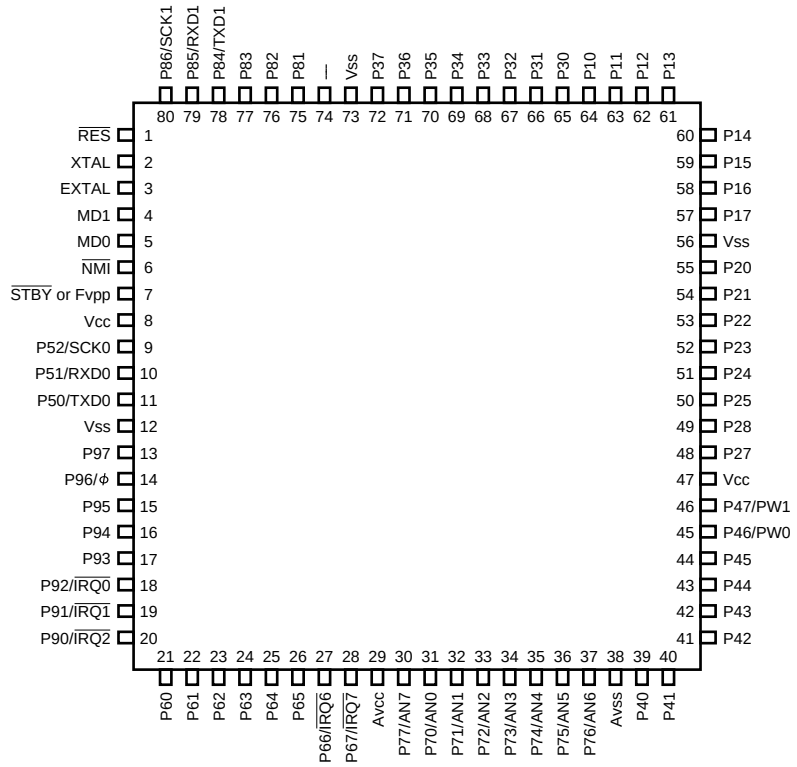


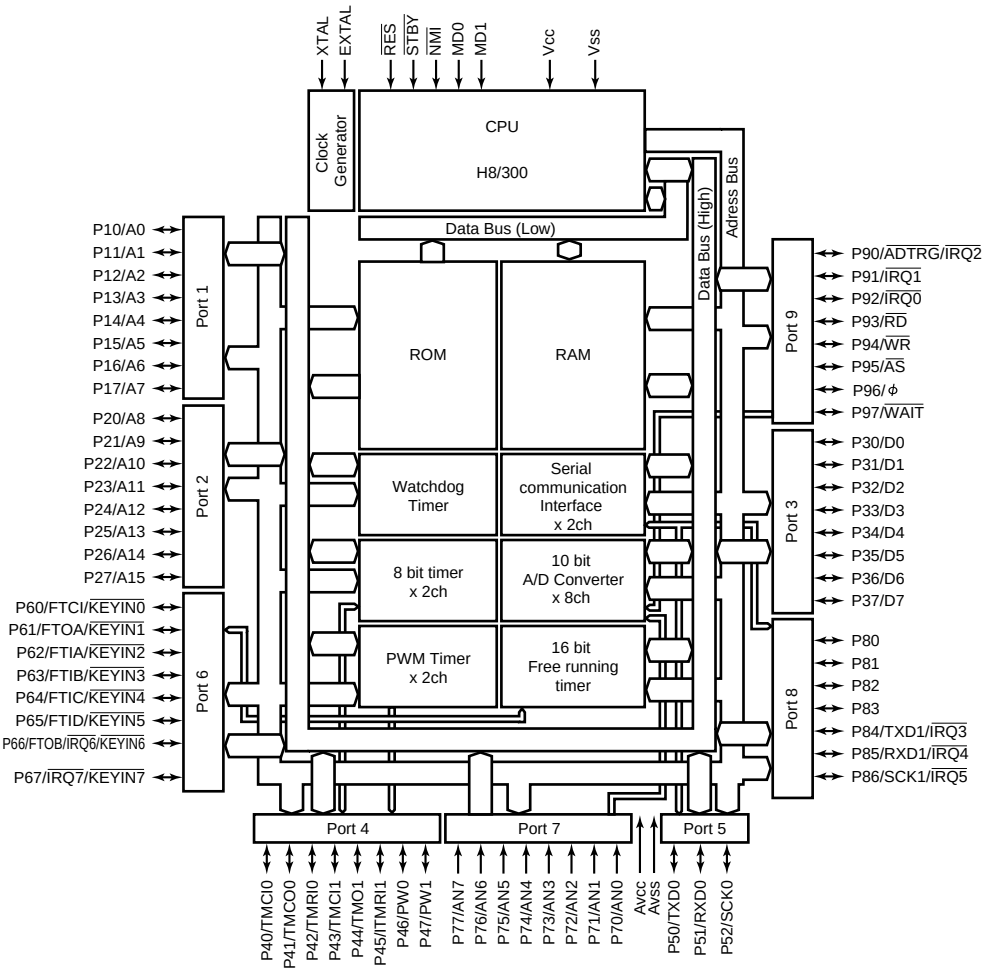


No.	Name	Function
1	AM1	Anode outputs Pull-down resistors are built in.
2	AM2	
3	AM3	
4	AM4	
5	AM5	
6	AM6	
7	AM7	
8	AM8	
9	AM9	
10	AM10	
11	AM11	
12	AM12	
13	AM13	
14	AM14	
15	AM15	
16	AM16	
17	AM17	
18	AM18	
19	AM19	
20	AM20	
21	AM21	
22	AM22	
23	AM23	
24	AM24	
25	AM25	
26	AM26	
27	AM27	
28	AM28	
29	AM29	
30	AM30	
31	AM31	
32	AM32	

No.	Name	Function
33	AM33	Anode outputs Pull-down resistors are built in.
34	AM34	
35	AM35	
36	AA1	
37	AA2	
38	AA3	
39	AA4/G16	Anode/grid outputs Pull-down resistors are built in.
40	AA5/G15	
41	AA6/G14	
42	AA7/G13	
43	AA8/G12	
44	G11	Grid output pin Pull-down resistors are built in.
45	G10	
46	G9	
47	G8	
48	G7	
49	G6	
50	G5	
51	G4	
52	G3	
53	G2	
54	G1	
55	V_{FL}	Driver block Power supply
56	TEST	LSI test pin
57	V_{SS}	Logic block Power supply : GND
58	OSC	External oscillator RC circuit connection
59	OSCI	
60	V_{DD}	Logic block Power supply : +5V
61	$\overline{RES}$	System reset input pin
62	CE	Chip enable
63	CL	Sync clock
64	DI	Transfer data

IC21 : HD6433397A97F
Main Micro Processor





IC21 : HD6433397A97F

Main Micro Processor

No.	Name	Function	I/O	Detail of Function
1	/RES	/RES		CPU Reset
2	XTAL	XTAL		8MHz
3	EXTAL	EXTAL		8MHz
4	MD1	MD1		Mode Set 1 Normal:+5M Flush Write:+12V
5	MD0	MD0		Mode Set 0 Normal:+5M Flush Write:+5M
6	/NMI	Vcc		Vcc
7	/STBY or Fvpp	/STBY or Fvpp		Stand-by or Fvpp Normal:+5M Flush Write:+12V
8	Vcc	Vcc		Vcc
9	P52/SCK0	SCKN	O	SCK for Non Audio
10	P51/RXD0	RDTR/FSW	I	RXD for Non Audio (RDS) / Frequency Switch
11	P50/TXD0	SDTN	O	SDT for Non Audio
12	Vss	GND		GND
13	P97	CER	O	CE for Non Audio (RDS)
14	P96/ϕ	/ST	I	Tuner Stereo
15	P95	CES	O	CE for Non Audio (OSD)
16	P94	CEF1	O	CE for Non Audio (FL1)
17	P93	CEF0	O	CE for Non Audio (FL0)
18	P92//IRQ0	PDT	I	Power Detect (Low Level Detect)
19	P91//IRQ1	REM	I	Remote (Low Edge Detect)
20	P90//IRQ2	VSY	I	Video Vartial Sync (Low Edge Detect)
21	P60	SCKP	O	SCK for Tuner PLL
22	P61	SDTP	O	SDT for Tuner PLL
23	P62	RDTP	I	RDT for Tuner PLL
24	P63	CEP	O	CE for Tuner PLL
25	P64	/TMT	O	Tuner Mute
26	P65	/FLR	O	FL Reset
27	P66//IRQ6	——		——
28	P67//IRQ7	PSW	I	Power Switch
29	Avcc	Avcc		Avcc
30	P77/AN7	MTR	I	Tuner Meter
31	P70/AN0	KEY0	I	Key State 0
32	P71/AN1	KEY1	I	Key State 1
33	P72/AN2	KEY2	I	Key State 2
34	P73/AN3	REC	I	Recout Selector
35	P74/AN4	PRV	I	V Protection
36	P75/AN5	PRD	I	DC Protection
37	P76/AN6	THM	I	Thermal Detect
38	Avss	GND		GND
39	P40	VIND	O	Volume Indicator
40	P41	VUP	O	Volume Up

No.	Name	Function	I/O	Detail of Function
41	P42	VDN	O	Volume Down
42	P43	IPA	I	Input Selector A
43	P44	IPB	I	Input Selector B
44	P45	PRI	I	I Protection
45	P46/PW0	FAN	O	Fan Control
46	P47/PW1	/FMT	O	Full Mute
47	Vcc	Vcc		Vcc
48	P27	/MLY	O	Main Level Att.
49	P28	SPA	O	Speaker Relay A
50	P25	SPB	O	Speaker Relay B
51	P24	SPE	O	Speaker Relay Ext
52	P23	CEL	O	CE Sanyo for Audio
53	P22	CET	O	CE Toshiba for Audio
54	P21	SDTA	O	SDT for Audio
55	P20	SCKA	O	SCK for Audio
56	Vss	GND		GND
57	P17	/R2MT	O	Room 2 Mute
58	P16	I/E	O	Video Internal/External
59	P15	VRC	O	Video Recout Select C
60	P14	VRB	O	Video Recout Select B
61	P13	VRA	O	Video Recout Select A
62	P12	VIC	O	Video Input Select C
63	P11	VIB	O	Video Input Select B
64	P10	VIA	O	Video Input Select A
65	P30	PRY	O	Power Relay
66	P31	Z2DET	I	Zone 2 Detect
67	P32	TUN0	I	Tuner Mode 0
68	P33	TUN1	I	Tuner Mode 1
69	P34	VID	I	Video Format
70	P35	RDS	I	RDS Exist or Not
71	P36	TYP0	I	Model Type 0
72	P37	TYP1	I	Model Type 1
73	Vss	GND		GND
74	——	——		——
75	P81	/SBR	O	Sub CPU Reset
76	P82	TRO	I	CPU I/F Transfer Request
77	P83	WCIF	I	CPU I/F Word Clock
78	P84/TXD1	MTS/TXD1	O	Normal:CPU I/F Main to Sub Flush Write:TXD1
79	P85/RXD1	STM/RXD1	I	Normal:CPU I/F Sub to Main Flush Write:RXD1
80	P86/SCK1	CKIF	O	CPU I/F Clock

(Note 1) Pin 10 Frequency Switch (R only)

0	AM : 530-1710kHz (10kHz step)	FM : 87.5-108.0MHz (100kHz step)
1	AM : 531-1611kHz (9kHz step)	FM : 87.5-108.0MHz (50kHz step)

(Note 2) Pin 67, 68 Tuner Mode 0 and 1

Tuner Mode 1	Tuner Mode 0	Tuner Frequency		
0	0	AM : 531-1611kHz (9kHz step)	FM : 76.0-90.0MHz (100kHz step)	J
0	1	AM : 530-1710kHz (10kHz step)	FM : 87.5-107.9MHz (200kHz step)	U, C
1	0	AM : 531-1611kHz (9kHz step)	FM : 87.5-108.0MHz (50kHz step)	A, L,G
1	1	Tuner Frequency is selected by Frequency Switch (Pin 10)		R, T

(Note 3) Pin 69 Video Format

0	NTSC
1	PAL

(Note 4) Pin 70 RDS Exist or Not

0	Not Exist
1	Exist

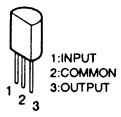
(Note 5) Pin 71, 72 Model Type 0 and 1

Model Type 1	Model Type 0	Model Name
0	0	RX-V2095
0	1	DSP-A2
1	0	RX-V995
1	1	RX-V795a

■ PIN CONNECTION DIAGRAM

● ICs

NJM78L05A



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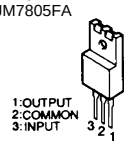

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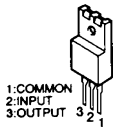

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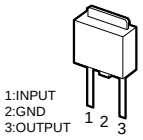

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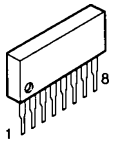

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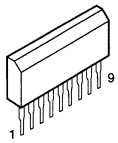

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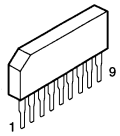

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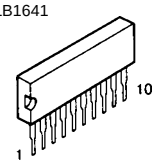

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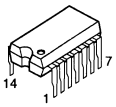

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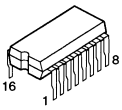

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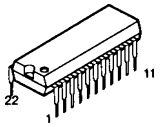

LA1266
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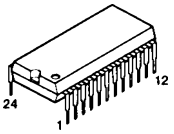
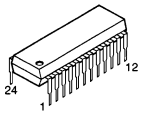
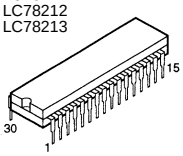


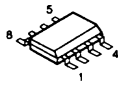
LC72720N



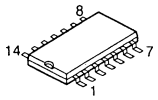
LC78211
LC78212
LC78213



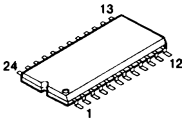
NJM2904M-T1
µPC4570G2
NJM2068MD
M5220FP



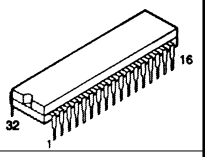
HD74HC02FPEL



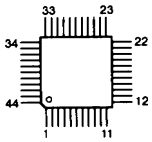
AK4320-VM



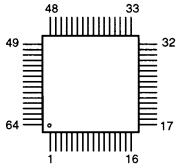
M5M51288BKJ-20L



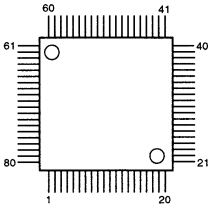
AK4526
YM3436DK



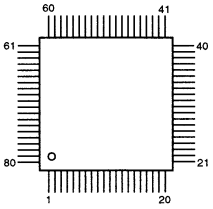
LC75710NE
LC75712E



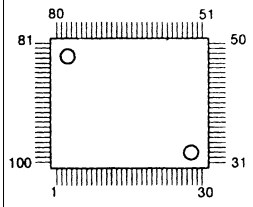
HD6433397A97F



LC87F5164A

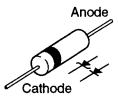


YSS918F

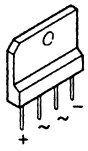


● Diodes

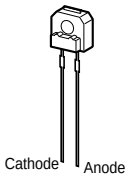
1SS133
1SS270A
HZS5B2TD
HZS6B2TD
HZS6C2TD
HZS7B2TD
HZS9A2TD
HZS12B2TD
HZS12C2TD
HZS242TD
HZS302TD
MTZJ5.6B



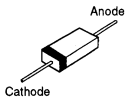
D5SB20



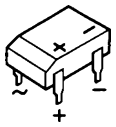
SIM-22ST



1SS355

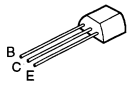


S1NB20

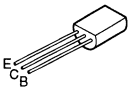


● Transistors

2SA933S (Q, R)
2SC1740S (R, S)
2SD1915F(S, T)
DTA144ES
DTC144ES



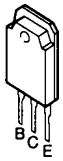
2SA893A (D, E)
2SA970(GR, BL)
2SA1015 (Y)
2SC535 (A, B, C)
2SC1815 (Y)
2SC1890A (D, E)
2SC2229(O, Y)
2SC2240(GR, BL)



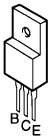
2SA1037(Q, R, S)
2SC2412K(Q, R, S)
2SC3326 (A, B)
DTA144EK
DTC144EKA

2SA1358 (O, Y)

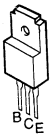
2SA1492 (O, P, Y)



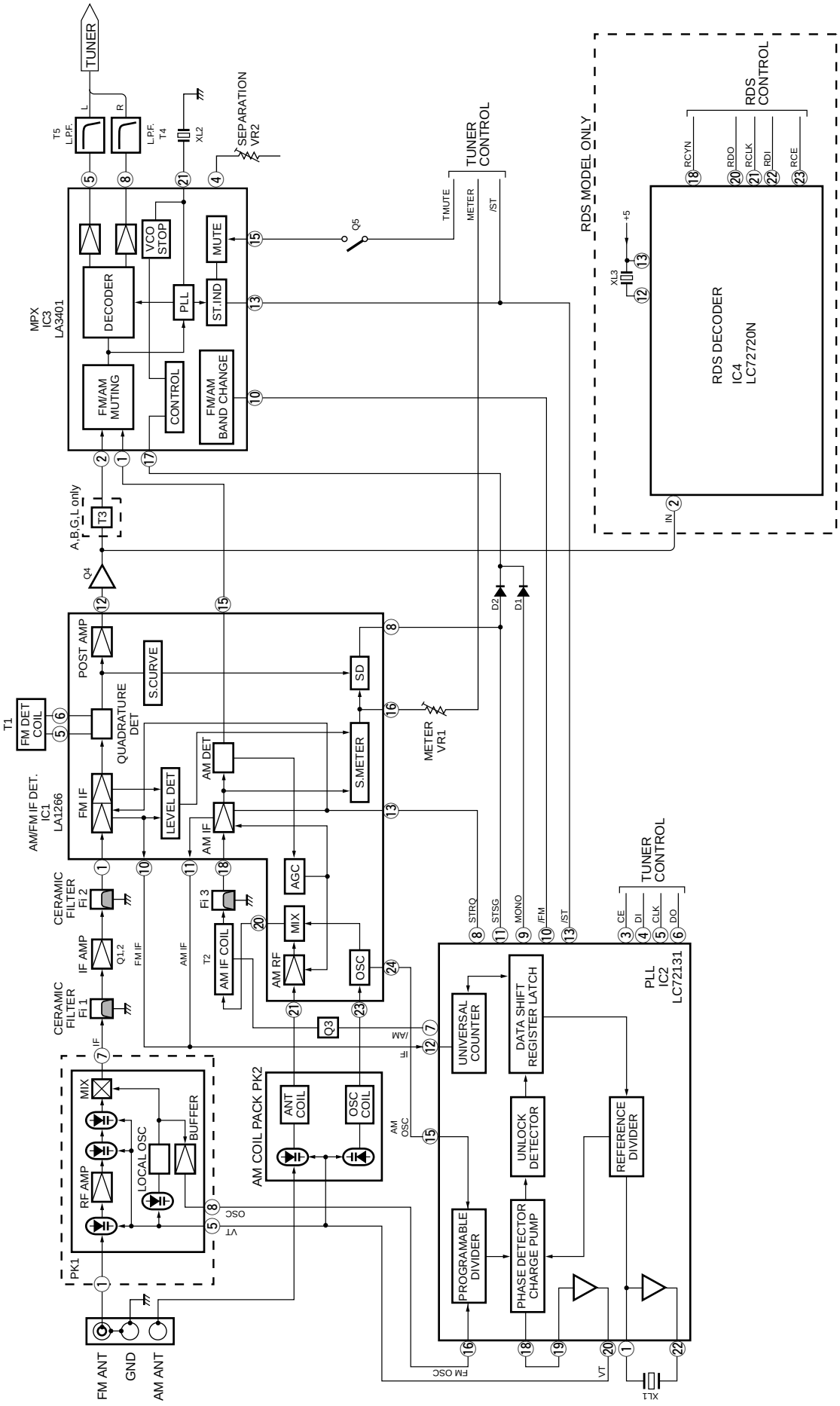
2SC4495
2SD2396(J, K)



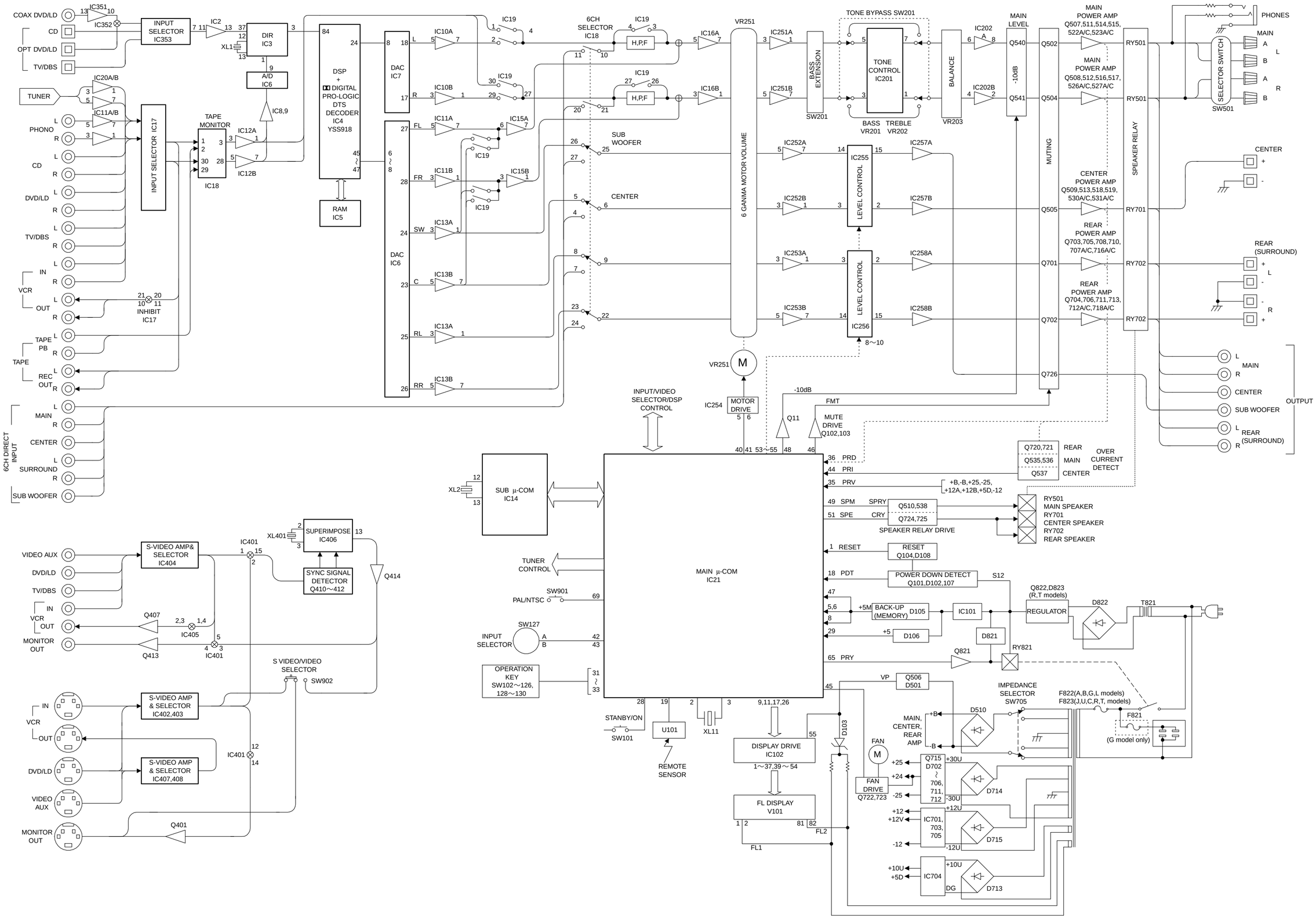
2SB941(P, Q)



■ BLOCK DIAGRAM



■ BLOCK DIAGRAM



BLOCK DIAGRAM

■ SCHEMATIC DIAGRAM (DSP)

NOTICE (model)
(J)..... JAPANESE
(U)..... U.S.A
(C)..... CANADIAN
(R)..... GENERAL
(A)..... AUSTRALIAN
(B)..... BRITISH
(G)..... EUROPEAN
(T)..... CHINA
(L)..... SINGAPORE

CAPACITOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
◉	CERAMIC TUBULAR CAPACITOR
⊗	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
Ⓘ	MICA CAPACITOR
◎	POLYPROPYLENE FILM CAPACITOR
◉	SEMICONDUCTIVE CERAMIC CAPACITOR

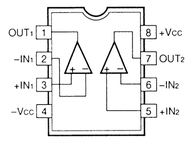
RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊘	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

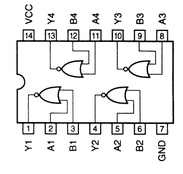
Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
&1	IC5	M5M51288BKJ-20LTEL 1S61C1024-20J
&2	IC1	NJM2904M NJM2904G
&3		
&4	Q4-13	2SC3326(A/B) 2SC3326(B)

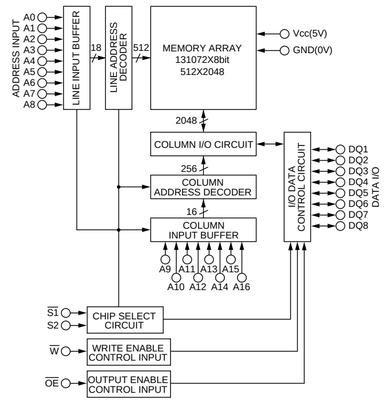
IC1 : NJM2904M
IC8~11, 13 : μPC4570G2
Dual OP Amp



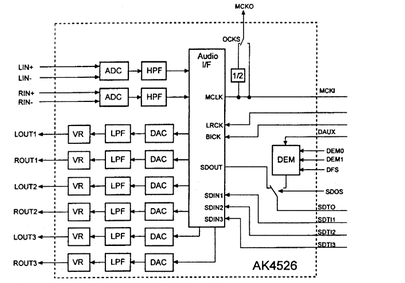
IC2 : HD74HC02FPEL
Quad 2 Input NOR



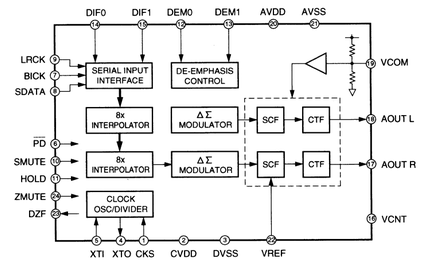
IC5 : M5M51288BKJ-20L
RAM



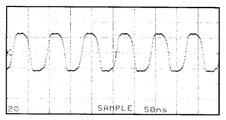
IC6 : AK4526
A/D



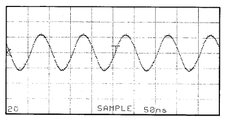
IC7 : AK4320
1 bit D/A Converter



Point ⑤ (Pin13 of IC3)
V : 2V/div H : 50 nsec/div
DC range 1 : 1 probe



Point ⑥ (Pin13 of IC14)
V : 2V/div H : 50 nsec/div
DC range 1 : 1 probe

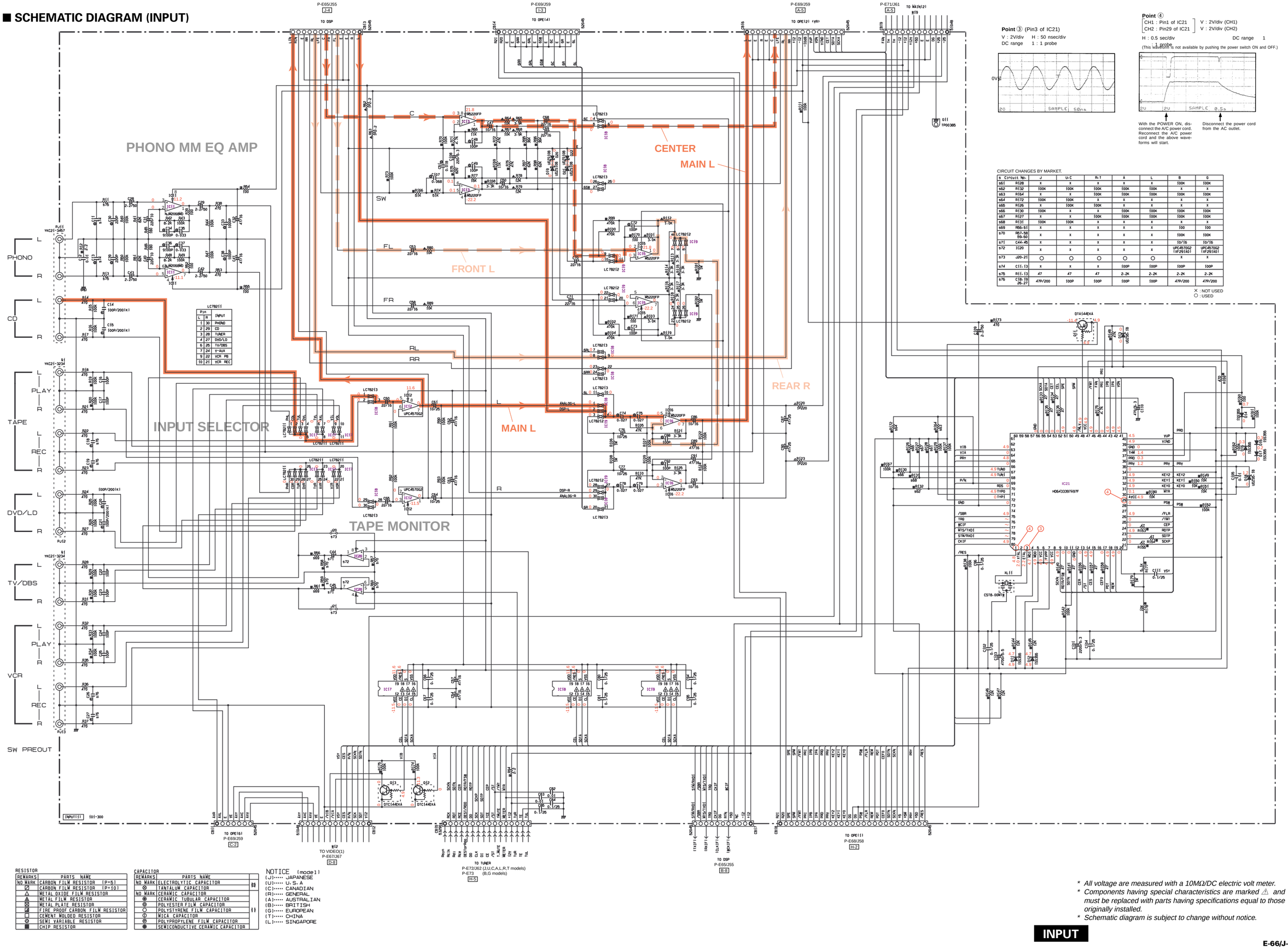


Other ICs
- **IC3 : YM3436DK** → **See page E-27/J-23**
- **IC4 : YSS918-F** → **See page E-28/J-24**
- **IC14 : LC87F5164** → **See page E-31/J-27**

** All voltage are measured with a 10MΩ/DC electric volt meter.*
** Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.*
** Schematic diagram is subject to change without notice.*

DSP

■ SCHEMATIC DIAGRAM (INPUT)



Point ③ (Pin3 of IC21)
V : 2V/div H : 50 nsec/div
DC range 1 : 1 probe

Point ④
CH1 : Pin1 of IC21 V : 2V/div (CH1)
CH2 : Pin29 of IC21 V : 2V/div (CH2)
H : 0.5 sec/div DC range 1
1 probe
(This waveform is not available by pushing the power switch ON and OFF.)

With the POWER ON, disconnect the A/C power cord. Reconnect the A/C power cord and the above waveforms will start.

Disconnect the power cord from the AC outlet.

CIRCUIT CHANGES BY MARKET.

s	Circuit No.	J	U-C	A-T	A	L	B	G
s61	R128	x	x	x	x	100K	100K	100K
s62	R132	100K	100K	100K	100K	100K	x	x
s63	R164	x	x	100K	100K	100K	100K	100K
s64	R172	100K	100K	x	x	x	x	x
s65	R126	x	100K	100K	x	x	x	x
s66	R130	100K	x	x	100K	100K	100K	100K
s67	R127	x	x	100K	100K	100K	100K	100K
s68	R131	100K	100K	x	x	x	x	x
s69	R56-61	x	x	x	x	x	100	100
s70	R57-58 59-60	x	x	x	x	x	100K	100K
s71	C44-45	x	x	x	x	x	10/16	10/16
s72	IC20	x	x	x	x	x	UPC4570G2 (nF29140)	UPC4570G2 (nF29140)
s73	J20-21	○	○	○	○	○	x	x
s74	C(1.13	x	x	x	100P	100P	100P	100P
s75	R(1.13	47	47	47	2.2K	2.2K	2.2K	2.2K
s76	C18-19 26-27	47P/200	100P	100P	100P	100P	47P/200	47P/200

× : NOT USED
○ : USED

LC78211

Pin		
L	R	INPUT
1	30	PHONO
2	29	CD
3	28	TUNER
4	27	DVD/LD
5	25	TV/DBS
7	24	Y-AUX
9	22	VCR PB
10	21	VCR REC

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
☑	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

REMARKS	PARTS NAME
⊖	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
◉	CERAMIC TUBULAR CAPACITOR
◍	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
ⓘ	MICA CAPACITOR
ⓟ	POLYPROPYLENE FILM CAPACITOR
●	SEMICONDUCTIVE CERAMIC CAPACITOR

NOTICE [mode1]
(J)····· JAPANESE
(U)····· U.S.A
(C)····· CANADIAN
(R)····· GENERAL
(A)····· AUSTRALIAN
(B)····· BRITISH
(G)····· EUROPEAN
(T)····· CHINA
(L)····· SINGAPORE

* All voltage are measured with a 10MΩ/DC electric volt meter.
* Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.
* Schematic diagram is subject to change without notice.

INPUT

■ SCHEMATIC DIAGRAM (INPUT & VIDEO)

NOTICE (model)
(J)····· JAPANESE
(U)····· U.S.A
(C)····· CANADIAN
(R)····· GENERAL
(A)····· AUSTRALIAN
(B)····· BRITISH
(G)····· EUROPEAN
(T)····· CHINA
(L)····· SINGAPORE

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
☑	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
☒	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	⫼
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	⫼
◉	CERAMIC TUBULAR CAPACITOR	
◎	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
ⓘ	MICA CAPACITOR	
ⓟ	POLYPROPYLENE FILM CAPACITOR	
◉	SEMICONDUCTIVE CERAMIC CAPACITOR	
Ⓢ	POLYPHENYLENE SULFIDE FILM CAPACITOR	

Interchangeable Parts at Manufacture-Stage

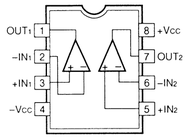
Mark	Reference Parts Number	Parts Name
▲1	D402-409.709.710	HSS104 1SS133 1SS176
▲2	IC401	TC4053BP UPD4053BC
▲3	Q401.407.724	2SC1740SIR/S| 2SC2603|E/F| 2SC3311A|Q/R/S|
▲4	Q414	2SA933S|Q/R| 2SA1115|E/F| 2SA1309A|Q/R/S|
▲5	Q402	2SD1915F|S/T| 2SC2878|A/B|
▲11	D821	HSS104 1SS133 1SS176
▲12	Q821	2SC1740S|R/S| 2SC2603|E/F| 2SC3311A|Q/R/S|

CIRCUIT CHANGES BY MARKET.

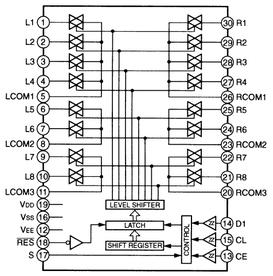
S	Circuit No.	J	U-C	R-T	A	L	B	G
1	Q822	x	x	D2396|J/K|	x	x	x	x
2	J821	0	0	x	0	0	0	0
3	C821	x	x	1000P	x	x	x	x
4	D823	x	x	HZS12B2	x	x	x	x
5	RB22-823	x	x	5.6K	x	x	x	x
6	CB25-828	x	x	100/35	x	x	x	x
7	RB24	x	1/2P2.2M	x	x	x	x	x
8	T821	XC542 X5597	XC083 X0485	XT331 XT341	XC084 X0486	XC084 X0486	XC084 X0486	XC084 X0486
9	TE821	YU54310	YU54310	YU54310	YT91500	YU54340	YU54330	YU54340
10	J822	0	0	0	0	0	0	x
11	CB827-828	YP20650	YP20650	YP20650	x	x	x	x
12	F823	BA125Y	BA125Y	BA125Y	x	x	x	x
13	CB822-826	x	x	x	x	x	x	YP20650
14	F821	x	x	x	x	x	x	T2.5AL250Y
15	CB824-826	x	x	x	YP20650	YP20650	YP20650	YP20650
16	F822	x	x	x	T4.0AL250Y	T4.0AL250Y	T4.0AL250Y	T4.0AL250Y
17	CB23	330/25	470/25	330/25	330/25	330/25	330/25	330/26
18								
19	SB851	x	x	YA96180	x	x	x	x
20	CB851-852	x	x	YP20650	x	x	x	x
21	FB51	x	x	T4.0AL250Y	x	x	x	x
22	▣853	x	x	WH03240	x	x	x	x
23	▣852	x	x	WH01240	x	x	x	x
24	▣851	x	x	WH04240	x	x	x	x
25	▣856	x	x	WH06240	x	x	x	x
26	▣855	x	x	WH02240	x	x	x	x
27	▣854	x	x	WH09240	x	x	x	x
28	RY821	V271230 Y007340 Y285040	Y269530	V271230 Y007340 Y285040	V271230 Y007340 Y285040	V271230 Y007340 Y285040	V271230 Y007340 Y285040	V271230 Y007340 Y285040
31	C750-762	x	x	x	0.01 UA95410	0.01 UA95410	0.01 UA95410	0.01 UA95410
32	C764-765	x	x	x	0.022 UA95422	0.022 UA95422	0.022 UA95422	0.022 UA95422
33	C775-779	x	x	x	0.012 UA95412	0.012 UA95412	0.012 UA95412	0.012 UA95412
34	TE701	Y250500	Y250500	Y250500	Y250500	Y250510	Y250510	Y250510
35	XL401	YY94980	YY94980	YY94980	YY94990	YY94990	YY94990	YY94990

× : NOT USED
○ : USED

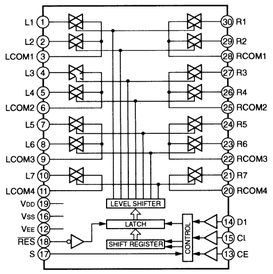
IC11 : NJM2068MD
IC12, 20 : µPC4570G2
IC13, 15, 16 : M5220FP
Dual OP Amp



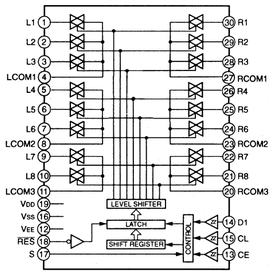
IC17 : LC78211
Analog Function Switch



IC18 : LC78213
Analog Function Switch

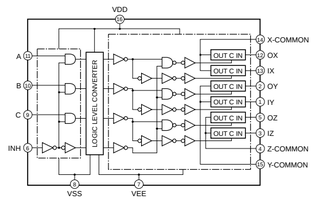


IC19 : LC78212
Analog Function Switch

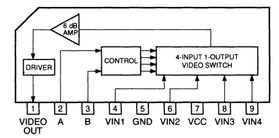


Other ICs
- **IC21 : HD6433397A97F** → See page E-36/J-30
- **IC406 : LC74781-9626** → See page E-35/J-29

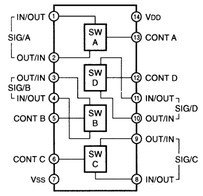
IC401 : TC4053BP
Triple 2-Channel Analog Multiplexers/ Demultiplexers



IC402~404, 407, 408 : LA7956
Video Switch



IC405 : µPD4066BC
Quad Analog Switch/Multiplexer



S-VIDEO AMP & SELECTOR

SUPERIMPOSE

SYNC SIGNAL DETECTOR

REGULATOR

SPEAKER RELAY DRIVE

REAR L
CENTER

SUB POWER SUPPLY

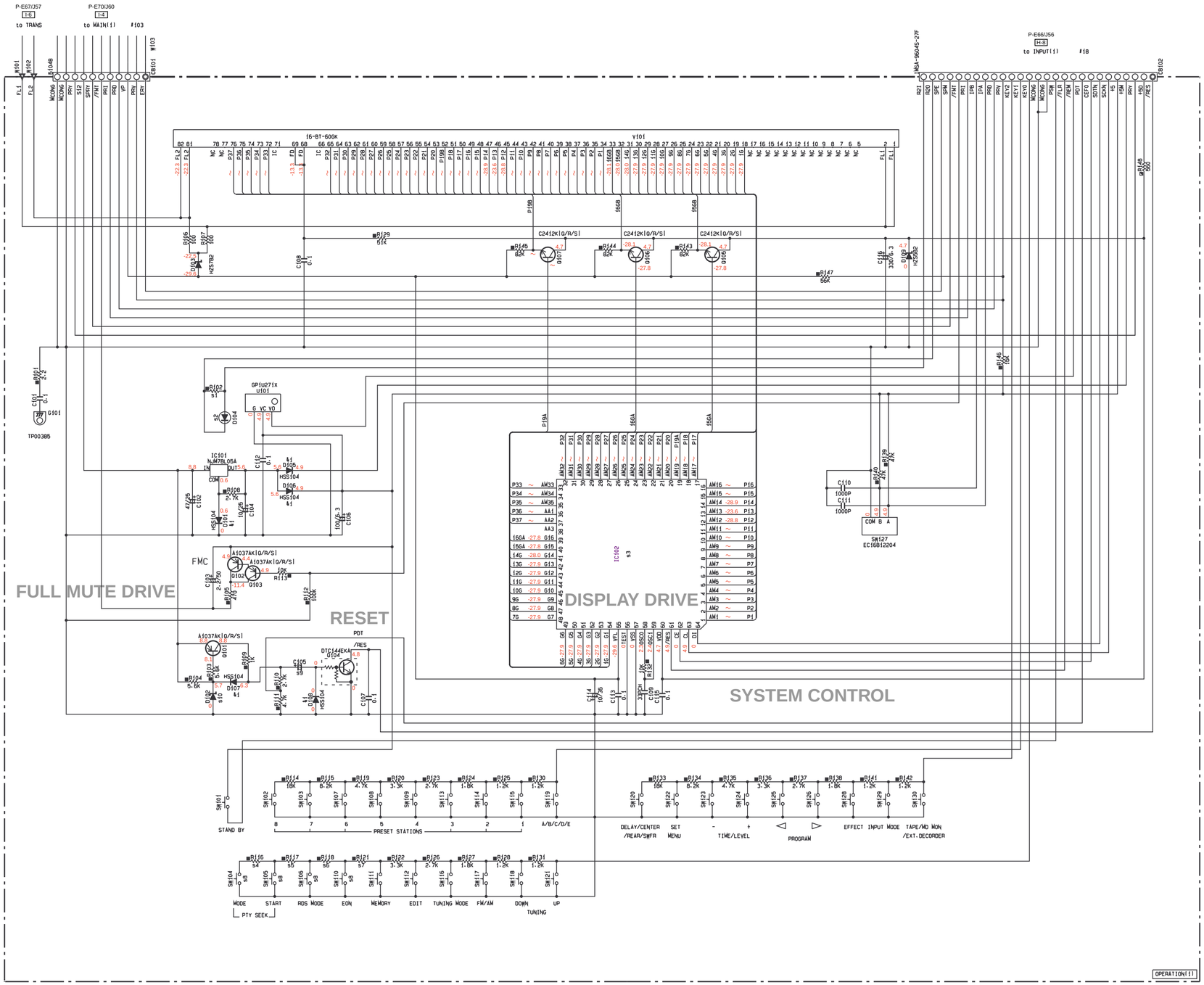
	/VIA	/VIB
TV/DBS	L	L
DVD/LD	H	L
VCR	L	H
V-AUX	H	H

TO INPUT(1) #12 P-E66/J56 D-8
TO OPERATION(4) #402 P-E69/J59 I-2
TO MAIN (2) P-E71/J61 G-2
TO MAIN (1) P-E70/J60 I-5
TO MAIN (5) #706-708-710
TO OPERATION(1) #101-102 P-E68/J58 A-1

** All voltage are measured with a 10MΩ/DC electric volt meter.*
** Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.*
** Schematic diagram is subject to change without notice.*

INPUT & VIDEO

■ SCHEMATIC DIAGRAM (OPERATION)



CAPACITOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
◉	CERAMIC TUBULAR CAPACITOR
◎	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
Ⓘ	MICA CAPACITOR
ⓟ	POLYPROPYLENE FILM CAPACITOR
◉	SEMICONDUCTIVE CERAMIC CAPACITOR

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
◪	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

NOTICE (model)
(J)..... JAPANESE
(U)..... U.S.A
(C)..... CANADIAN
(R)..... GENERAL
(A)..... AUSTRALIAN
(B)..... BRITISH
(G)..... EUROPEAN
(T)..... CHINA
(L)..... SINGAPORE

Interchangeable Parts at Manufacture-Stage

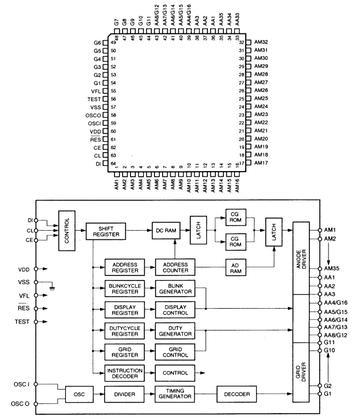
Mark	Reference Parts Number	Parts Name
k1	D101-D105-108	HSS104 1SS133 1SS176
k2		
k3		

CIRCUIT CHANGES BY MARKET.

	MODEL No.	DSP-R795a/RX-V795a/RDSML/HTR-5170ML			
s	Circuit No.	J-L	U-C-A	R-T	B-G
1	R102	×	10K	×	×
2	D104	×	VV62510	×	×
3	IC102	XR18BA0	XR18BA0	XR18BA0	XY166A0
4	R116	×	×	×	47K
5	R117	×	×	×	18K
6	R118	×	×	×	8.2K
7	R121	×	×	×	4.7K
8	SW104-106-110	×	×	×	VG39290
9	C105	1/50	1/50	2.2/50	1/50
10	D102	HZ56B2	HZ56B2	HZ56C2	HZ56B2

× : NOT USED

IC102 : LC75710NE
FL Display Driver



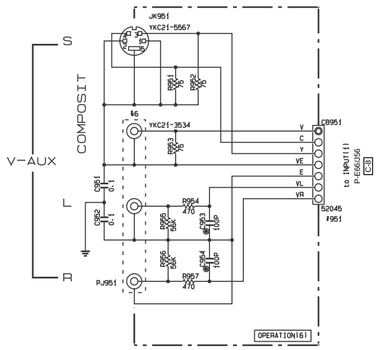
Other IC

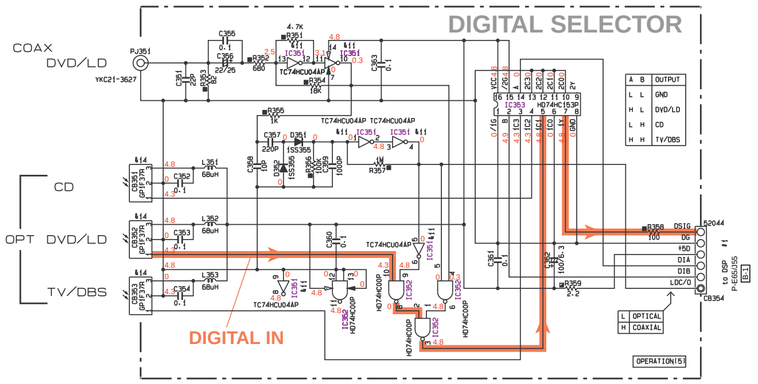
● **IC102 : LC75712E → See page E-35**

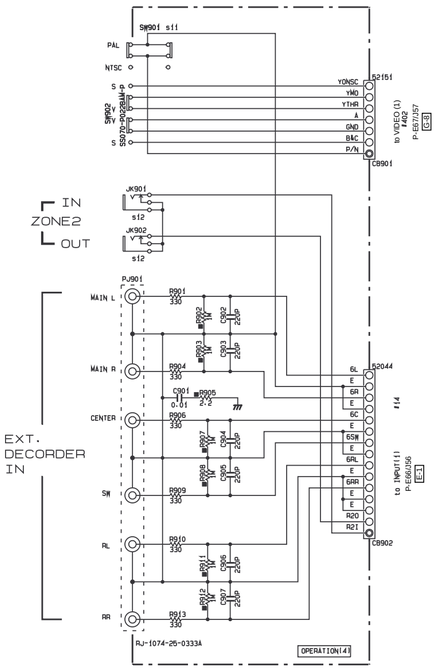
** All voltage are measured with a 10MΩ/DC electric volt meter.*
** Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.*
** Schematic diagram is subject to change without notice.*

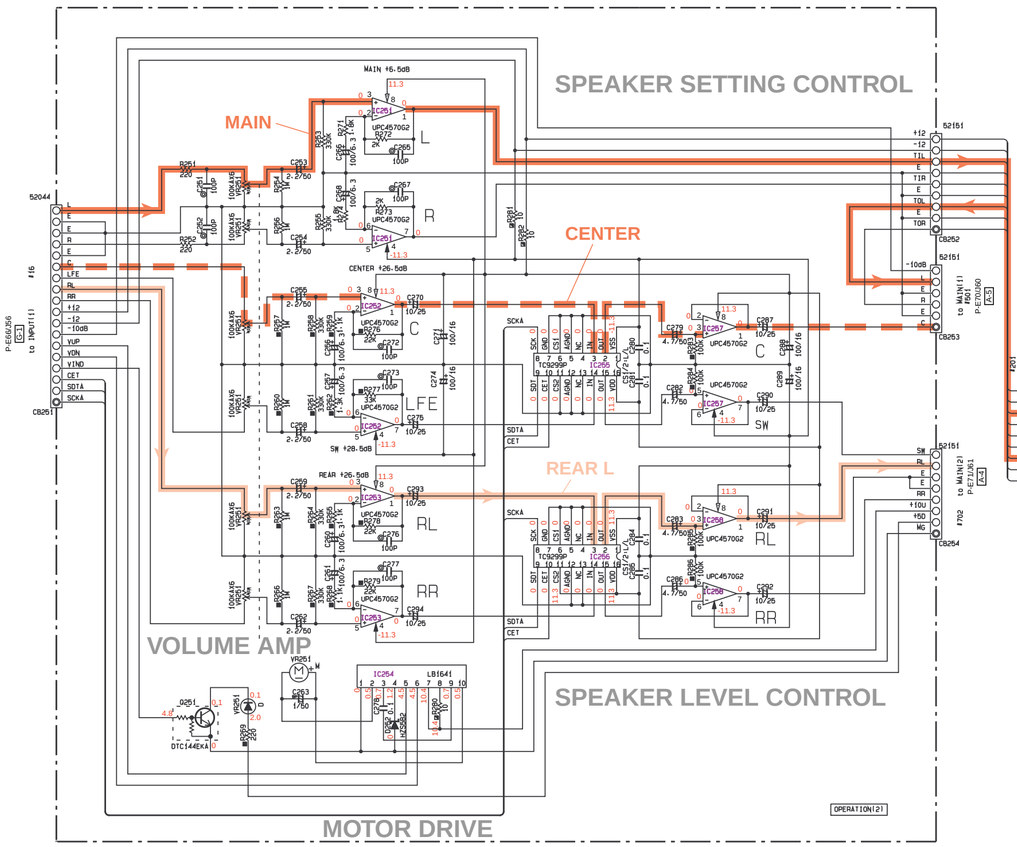
OPERATION

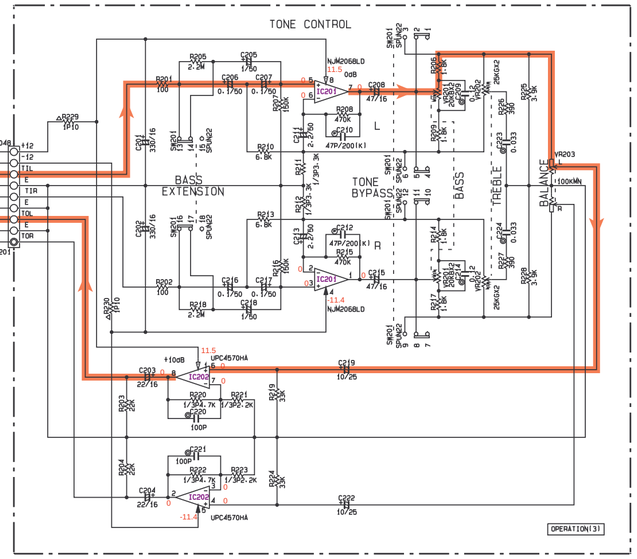
■ SCHEMATIC DIAGRAM (OPERATION)











CAPACITOR

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	耐圧
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	耐圧
◉	CERAMIC TUBULAR CAPACITOR	
◎	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
Ⓘ	MICA CAPACITOR	
Ⓟ	POLYPROPYLENE FILM CAPACITOR	
◉	SEMICONDUCTIVE CERAMIC CAPACITOR	

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
☑	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

NOTICE (model)
(J)····· JAPANESE
(U)····· U.S.A
(C)····· CANADIAN
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(T)····· CHINA
(L)····· SINGAPORE

Interchangeable Parts at Manufacture-Stage

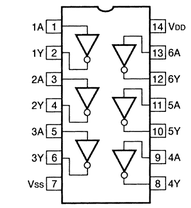
Mark	Reference Parts Number	Parts Name
&11	IC351	TC74HCU04AP SN74HCU04N MC74HCU04N
&12		
&13		
&14	CB351-353	GP1F37R TGRK178A
&15		

CIRCUIT CHANGES BY MARKET

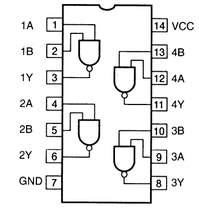
MODEL No.	DSP-R795a/Rx-V795a/RDSWL/HTR-5170WL			
s Circuit No.	J-L	U-C-A	R-T	B-G
s1 SW901	×	×	V560260	×
s2 JK901-JK902	×	VJ72680	×	×
s3				
s4				
s5				

× : NOT USED

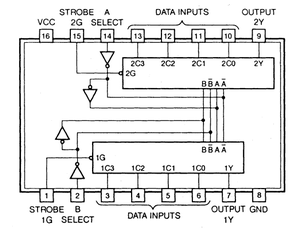
IC351 : TC74HCU04AP
Hex Inverters



IC352 : HD74HC00P
Quadruple 2-input Positive NAND Gates

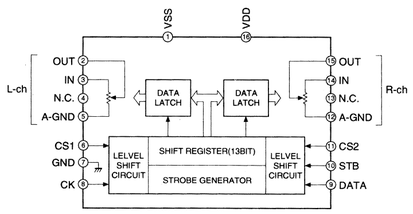


IC353 : HD74HC153P
Dual 4 to 1 Data Selectors

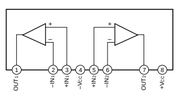


INPUTS		OUTPUT
SELECT	STROBE	
B A	G	Y
X X	H	L
L L	L	C0
L H	L	C1
H L	L	C2
H H	L	C3

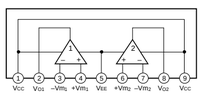
IC255, 256 : TC9299P
Electric Controlled Volume



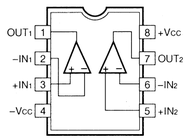
IC201 : NJM2068LD
Dual OP Amp



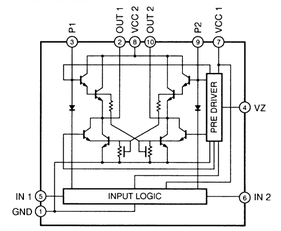
IC202 : µPC4570HA
Dual OP-Amp



IC251~253, 257, 258 : µPC4570G2
Dual OP-Amp



IC254 : LB1641
Motor Driver

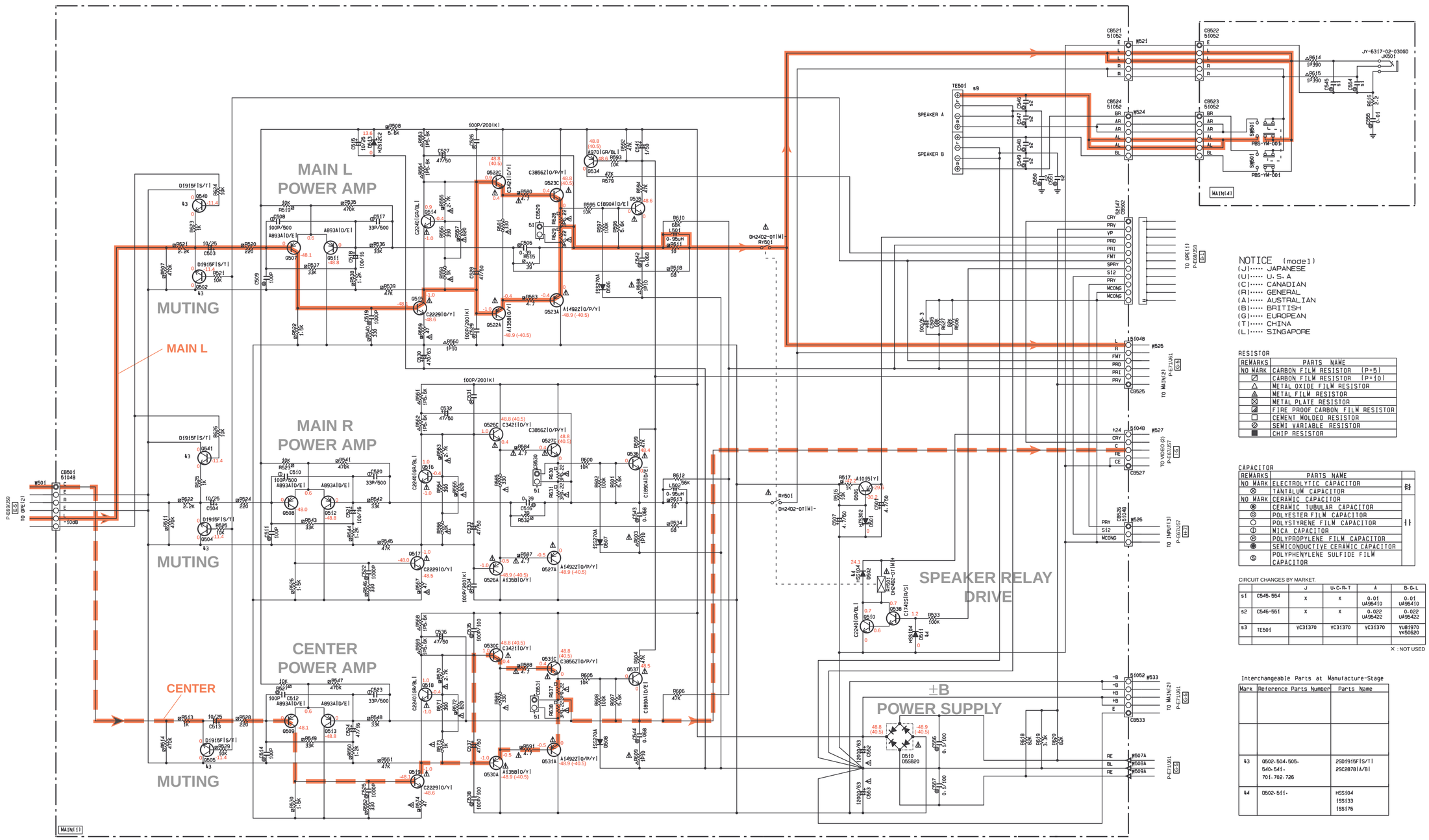


** All voltage are measured with a 10MΩ/DC electric volt meter.*
** Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.*
** Schematic diagram is subject to change without notice.*

OPERATION

■ SCHEMATIC DIAGRAM (MAIN)

Each voltage given here represents that in the top side of IMPEDANCE SELECTOR, but the one in the parentheses ( ) is that in the bottom side.



NOTICE (mode1)
(J)····· JAPANESE
(U)····· U.S.A
(C)····· CANADIAN
(R)····· GENERAL
(A)····· AUSTRALIAN
(B)····· BRITISH
(G)····· EUROPEAN
(T)····· CHINA
(L)····· SINGAPORE

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
☑	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	⫿
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	⫿
◉	CERAMIC TUBULAR CAPACITOR	
◎	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
ⓘ	MICA CAPACITOR	
ⓟ	POLYPROPYLENE FILM CAPACITOR	
◉	SEMICONDUCTIVE CERAMIC CAPACITOR	
Ⓢ	POLYPHENYLENE SULFIDE FILM CAPACITOR	

CIRCUIT CHANGES BY MARKET.

		J	U·C·R·T	A	B·G·L
s1	C545-554	x	x	0.01 UA95410	0.01 UA95410
s2	C546-551	x	x	0.022 UA95422	0.022 UA95422
s3	TE501	VC31370	VC31370	VC31370	YU81970 YK50620

× : NOT USED

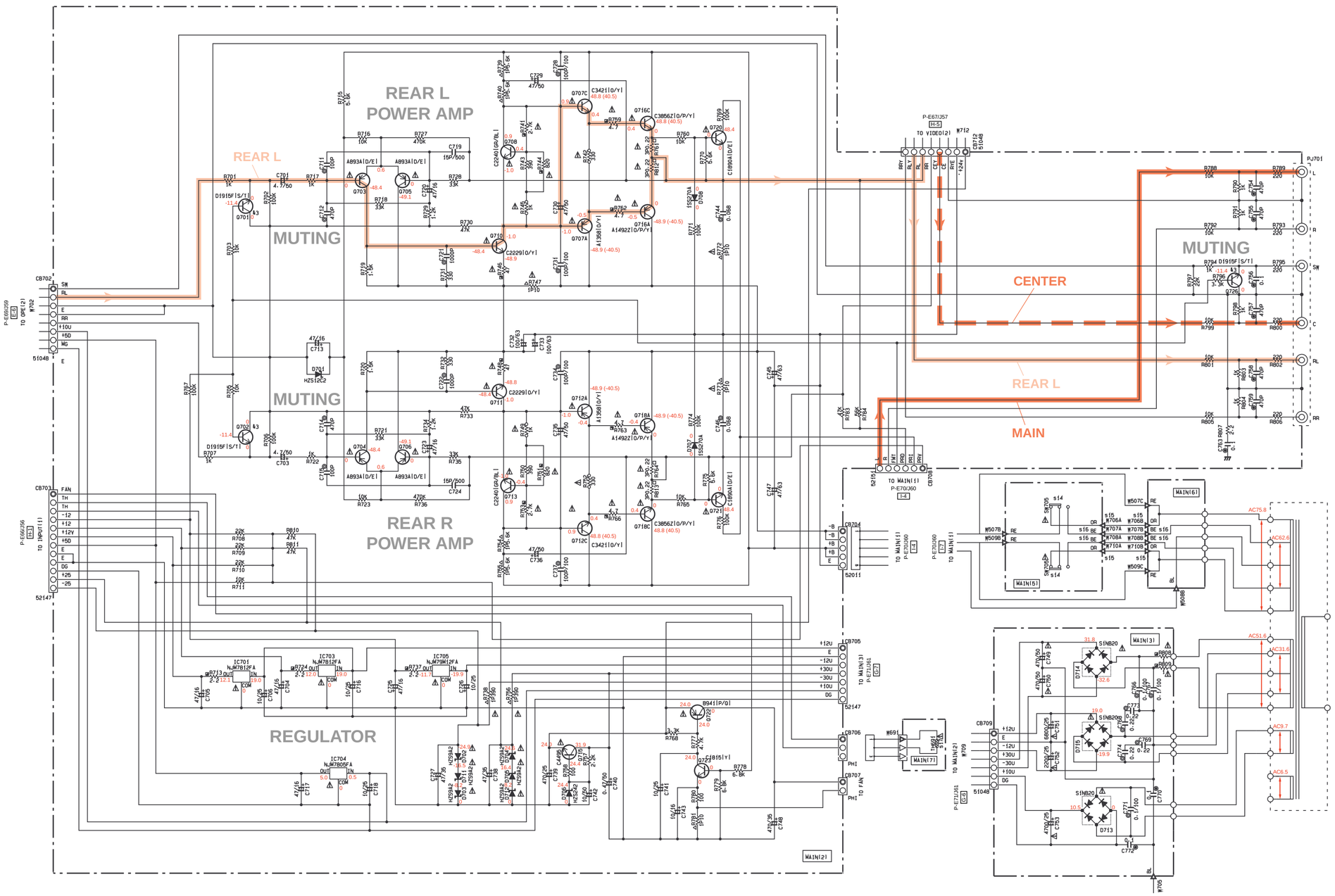
Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
‼3	0502·504·505· 540·541· 701·702·726	2SD1915F|S/T| 2SC2878|A/B|
‼4	0502·511·	HSS104 1SS133 1SS176

* All voltage are measured with a 10MΩ/DC electric volt meter.
* Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.
* Schematic diagram is subject to change without notice.

■ SCHEMATIC DIAGRAM (MAIN)

Each voltage given here represents that in the top side of IMPEDANCE SELECTOR, but the one in the parentheses ( ) is that in the bottom side.



NOTICE (model)
(J)····· JAPANESE
(U)····· U.S.A
(C)····· CANADIAN
(R)····· GENERAL
(A)····· AUSTRALIAN
(B)····· BRITISH
(G)····· EUROPEAN
(T)····· CHINA
(L)····· SINGAPORE

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
☑	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
◉	CERAMIC TUBULAR CAPACITOR
◎	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
ⓘ	MICA CAPACITOR
ⓟ	POLYPROPYLENE FILM CAPACITOR
◉	SEMICONDUCTIVE CERAMIC CAPACITOR

CIRCUIT CHANGES BY MARKET.

		J	U・C・R・T	A	L・B・G
s11	TH691	VM84220	VM84230	VM84230	VM84230
s12					
s13					
s14	SW705	x	SL13B-022-AMC|YZ36110	SL13B-022-AMC|YZ36110	SL13B-022-AMC|YZ36110
s15	W706・710	x	WH23016	WH23016	WH23016
s16	W707・708	x	WH26016	WH26016	WH26016
s20					
s21					
s22					
s23					

× : NOT USED

** All voltage are measured with a 10MΩ/DC electric volt meter.*
** Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.*
** Schematic diagram is subject to change without notice.*

MAIN

■ SCHEMATIC DIAGRAM (TUNER)

Each voltage given here represents that in the FM (98. 1MHz, STEREO) reception mode but the one in the parentheses ( ) is that in the AM (1080kHz, MAN'L) reception mode.

CAPACITOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
◉	CERAMIC TUBULAR CAPACITOR
◎	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
Ⓜ	MICA CAPACITOR
Ⓟ	POLYPROPYLENE FILM CAPACITOR
◉	SEMICONDUCTIVE CERAMIC CAPACITOR

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
◪	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

NOTICE (model)
(J)····· JAPANESE
(U)····· U.S.A
(C)····· CANADIAN
(R)····· GENERAL
(A)····· AUSTRALIAN
(B)····· BRITISH
(G)····· EUROPEAN
(T)····· CHINA
(L)····· SINGAPORE

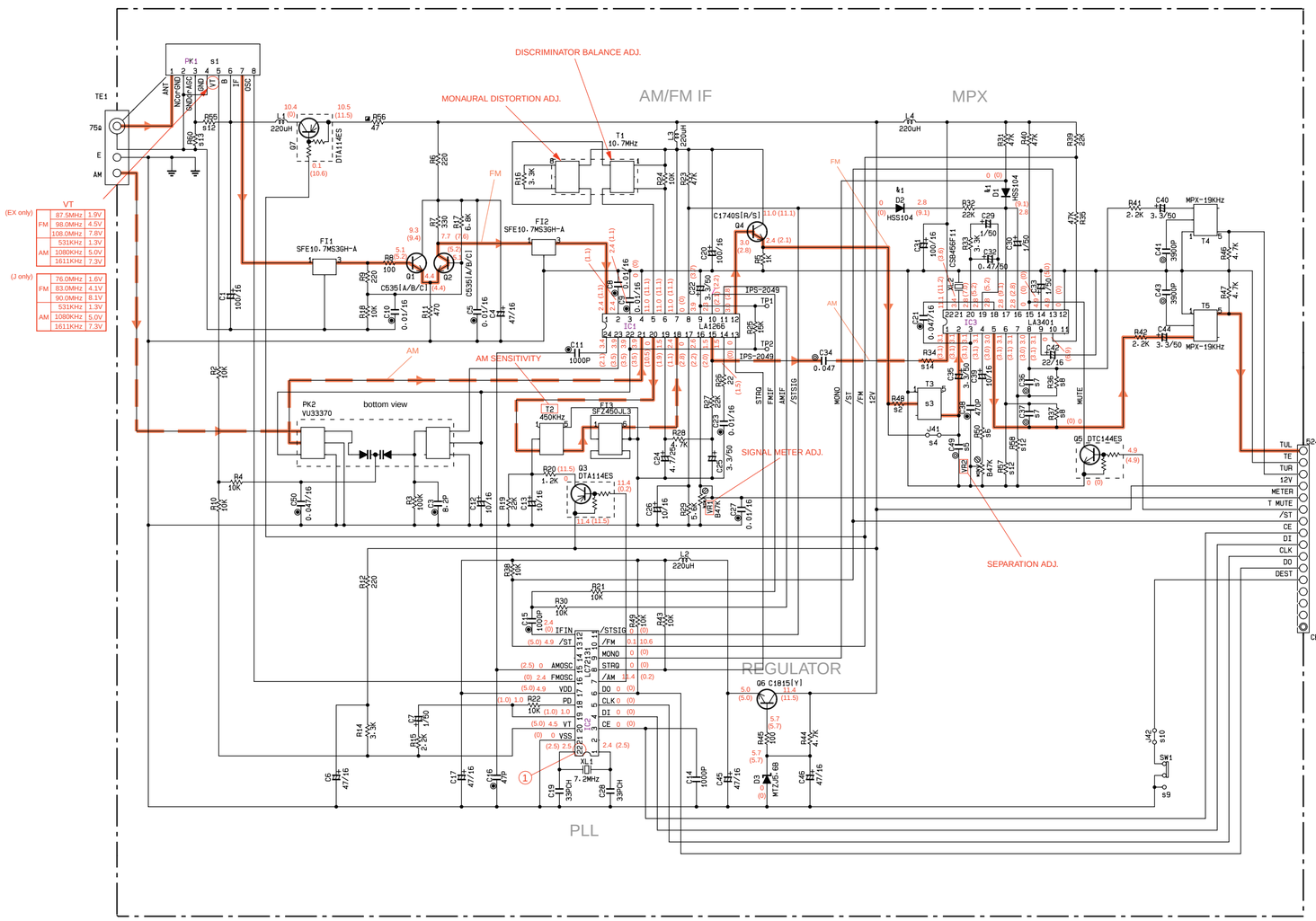
Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
◭1	D1.2	HSS104 1SS133 1SS176

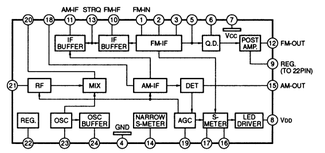
CIRCUIT CHANGES BY MARKET.

S		J V251850	U·C V251860	R·T V251870	A·B·G·L V251880
1	PK1	V290900	V290910	V290910	V271670
2	R48				4.7K
3	T3				XYA2 VT48680
4	J41	○	○	○	
5	C49	2200P UA95322	2200P UA95322	2200P UA95322	120P UA95212
6	R50	22K	22K	22K	1K
7	C36·37	680P UA95268	1000P UA95310	1000P UA95310	270P UA95227
8	R36·37	75K	75K	75K	180K
9	SW1			VS60260	
10	J42			○	
11					
12	R55·57·58				270K
13	R60				180K
14	R34	10K	10K	10K	27K

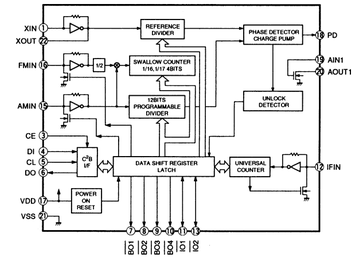
×: NOT USED
○: USED



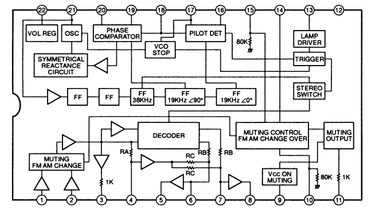
IC1 : LA1266
AM/FM IF



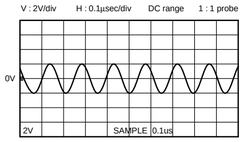
IC2 : LC72131
PLL Controller



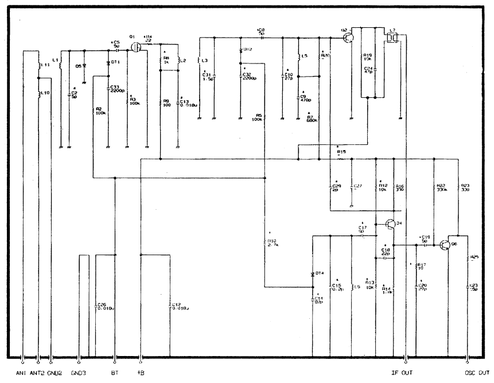
IC3 : LA3401
MPX



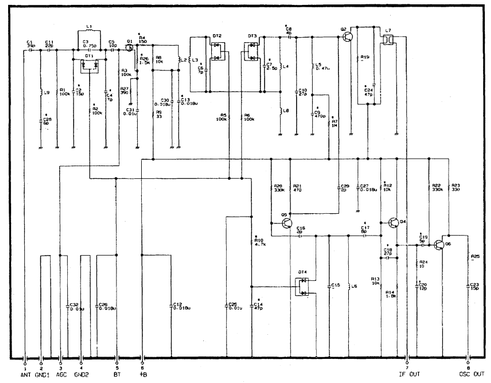
Point ① (Pin22 of IC2)



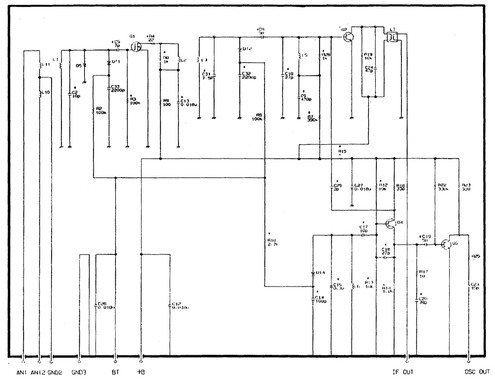
● **PK1 : ENV-172C8G1R (V2909100) U, C, R, T models**



● **PK1 : ENV-172A4G1 (V2716700) A, L models**



● **PK1 : ENV-142C2G1R (V2909000) J model**



** All voltage are measured with a 10MΩ/DC electric volt meter.*
** Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.*
** Schematic diagram is subject to change without notice.*

TUNER

■ SCHEMATIC DIAGRAM (TUNER)

Each voltage given here represents that in the FM (98. 1MHz, STEREO) reception mode but the one in the parentheses ( ) is that in the AM (1080kHz, MAN'L) reception mode.

CAPACITOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
◉	CERAMIC TUBULAR CAPACITOR
◎	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
Ⓘ	MICA CAPACITOR
Ⓟ	POLYPROPYLENE FILM CAPACITOR
◉	SEMICONDUCTIVE CERAMIC CAPACITOR

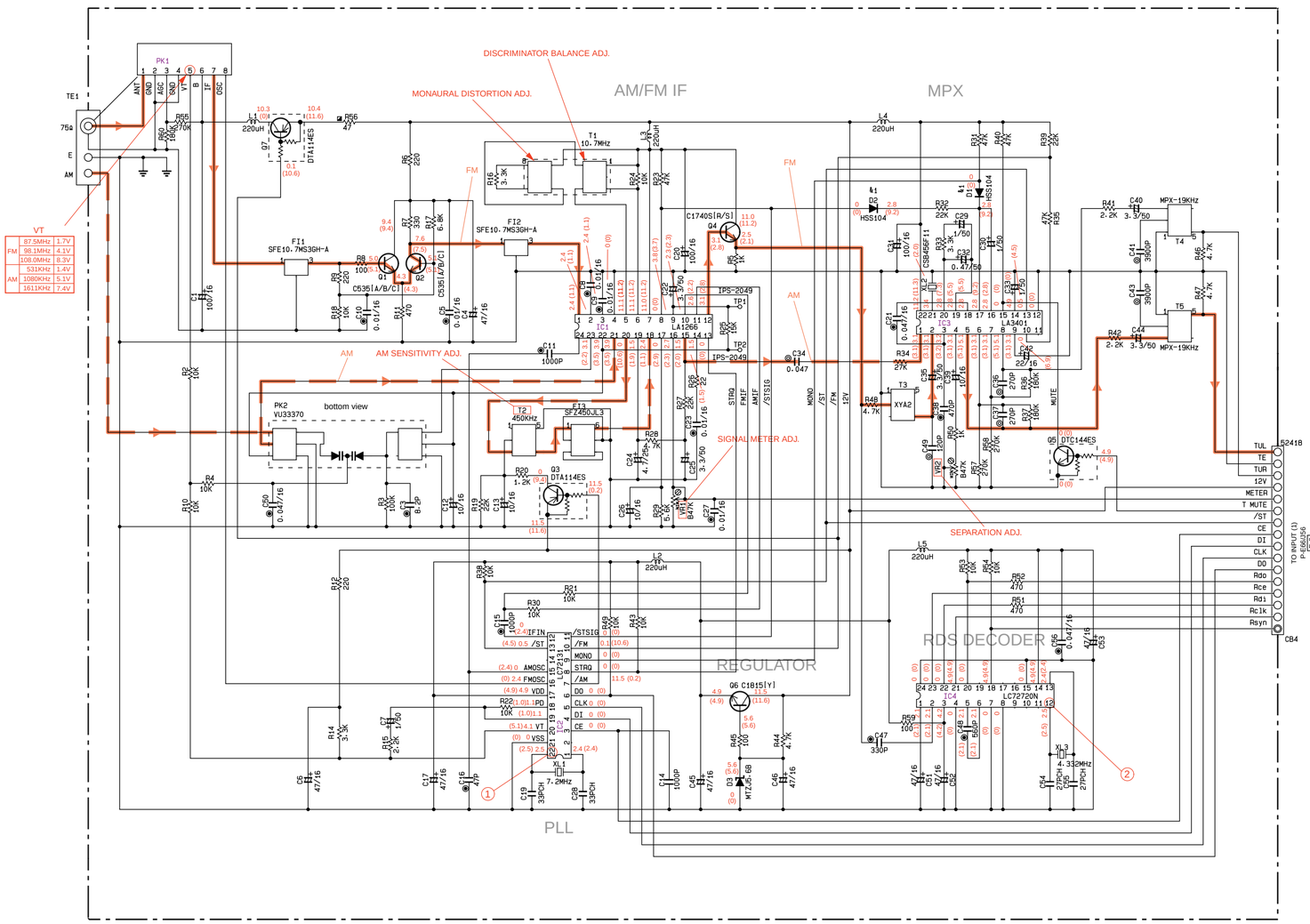
RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊠	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

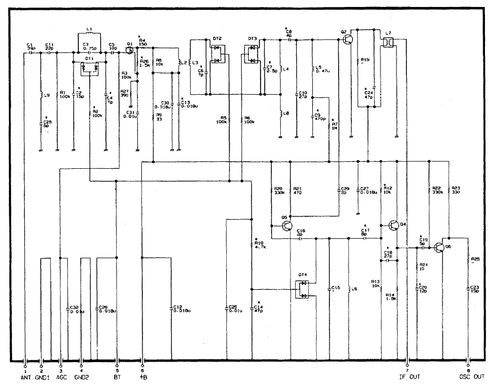
NOTICE (model)
(J)····· JAPANESE
(U)····· U. S. A
(C)····· CANADIAN
(R)····· GENERAL
(A)····· AUSTRALIAN
(B)····· BRITISH
(G)····· EUROPEAN
(T)····· CHINA
(L)····· SINGAPORE

Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
⚠1	D1.2	HSS104 1SS133 1SS176

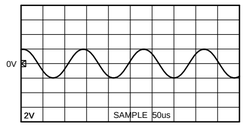


● **PK1 : ENV-172A4G1 (V2716700)**



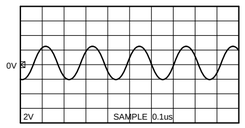
Point ① (Pin22 of IC2)

V : 2V/div H : 50nsec/div DC range 1 : 1 probe

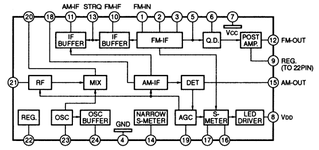


Point ② (Pin12 of IC4)

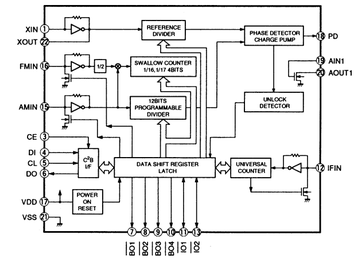
V : 2V/div H : 0.1μsec/div DC range 1 : 1 probe



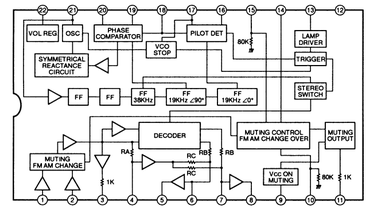
IC1 : LA1266
AM/FM IF



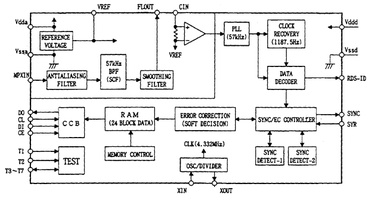
IC2 : LC72131
PLL Controller



IC3 : LA3401
MPX



IC4 : LC72720N
RDS Decoder & Controller



** All voltage are measured with a 10MΩ/DC electric volt meter.*
** Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.*
** Schematic diagram is subject to change without notice.*

TUNER

PARTS LIST

■ ELECTRICAL PARTS

■ **WARNING**

Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.

- Carbon resistors (1/6W or 1/4W) are not included in the ELECTRICAL PARTS List. For the part Nos. of the carbon resistors refer to page 94.
- Chip resistors are listed on page 87.

ABBREVIATIONS IN THIS LIST ARE AS FOLLOWS :

C.A.EL.CHP	:	CHIP ALUMI. ELECTROLYTIC CAP
C.CE	:	CERAMIC CAP
C.CE.ARRAY	:	CERAMIC CAP ARRAY
C.CE.CHP	:	CHIP CERAMIC CAP
C.CE.ML	:	MULTILAYER CERAMIC CAP
C.CE.M.CHP	:	CHIP MULTILAYER CERAMIC CAP
C.CE.SAFTY	:	RECOGNIZED CERAMIC CAP
C.CE.TUBLR	:	CERAMIC TUBULAR CAP
C.CE.SMI	:	SEMI CONDUCTIVE CERAMIC CAP
C.EL	:	ELECTROLYTIC CAP
C.MICA	:	MICA CAP
C.ML.FLM	:	MULTILAYER FILM CAP
C.MP	:	METALLIZED PAPER CAP
C.MYLAR	:	MYLAR FILM CAP
C.MYLAR.ML	:	MULTILAYER MYLAR FILM CAP
C.PAPER	:	PAPER CAPACITOR
C.PLS	:	POLYSTYRENE FILM CAP
C.POL	:	POLYESTER FILM CAP
C.POLY	:	POLYETHYLENE FILM CAP
C.PP	:	POLYPROPYLENE FILM CAP
C.TNTL	:	TANTALUM CAP
C.TNTL.CHP	:	CHIP TANTALUM CAP
C.TRIM	:	TRIMMER CAP
CN	:	CONNECTOR
CN.BS.PIN	:	CONNECTOR, BASE PIN
CN.CANNON	:	CONNECTOR, CANNON
CN.DIN	:	CONNECTOR, DIN
CN.FLAT	:	CONNECTOR, FLAT CABLE
CN.POST	:	CONNECTOR, BASE POST
COIL.MX.AM	:	COIL, AM MIX
COIL.AT.FM	:	COIL, FM ANTENNA
COIL.DT.FM	:	COIL, FM DETECT
COIL.MX.FM	:	COIL, FM MIX
COIL.OUTPT	:	OUTPUT COIL
DIOD.ARRAY	:	DIODE ARRAY
DIODE.BRG	:	DIODE BRIDGE
DIODE.CHP	:	CHIP DIODE
DIODE.VAR	:	VARACTOR DIODE
DIOD.Z.CHP	:	CHIP ZENER DIODE
DIODE.ZENR	:	ZENER DIODE
DSCR.CE	:	CERAMIC DISCRIMINATOR
FER.BEAD	:	FERRITE BEADS
FER.CORE	:	FERRITE CORE
FET.CHP	:	CHIP FET
FL.DSPLY	:	FLUORESCENT DISPLAY
FLTR.CE	:	CERAMIC FILTER
FLTR.COMB	:	COMB FILTER MODULE
FLTR.LC.RF	:	LC FILTER ,EMI
GND.MTL	:	GROUND PLATE
GND.TERM	:	GROUND TERMINAL
HOLDER.FUS	:	FUSE HOLDER
IC.PRTCT	:	IC PROTECTOR
JUMPER.CN	:	JUMPER CONNECTOR
JUMPER.TST	:	JUMPER, TEST POINT
L.DTCT	:	LIGHT DETECTING MODULE
L.EMIT	:	LIGHT EMITTING MODULE
LED.DSPLY	:	LED DISPLAY
LED.INFRD	:	LED, INFRARED
MODUL.RF	:	MODULATOR, RF
PHOT.CPL	:	PHOTO COUPLER
PHOT.INTR	:	PHOTO INTERRUPTER
PHOT.RFLCT	:	PHOTO REFLECTOR
PIN.TEST	:	PIN, TEST POINT
PLST.RIVET	:	PLASTIC RIVET
R.ARRAY	:	RESISTOR ARRAY
R.CAR	:	CARBON RESISTOR
R.CAR.CHP	:	CHIP RESISTOR
R.CAR.FP	:	FLAME PROOF CARBON RESISTOR
R.FUS	:	FUSABLE RESISTOR
R.MTL.CHP	:	CHIP METAL FILM RESISTOR
R.MTL.FLM	:	METAL FILM RESISTOR
R.MTL.OXD	:	METAL OXIDE FILM RESISTOR
R.MTL.PLAT	:	METAL PLATE RESISTOR
RSNR.CE	:	CERAMIC RESONATOR
RSNR.CRYS	:	CRYSTAL RESONATOR
R.TW.CEM	:	TWIN CEMENT FIXED RESISTOR
R.WW	:	WIRE WOUND RESISTOR
SCR.BND.HD	:	BIND HEAD B-TITE SCREW
SCR.BW.HD	:	BW HEAD TAPPING SCREW
SCR.CUP	:	CUP TITE SCREW
SCR.TERM	:	SCREW TERMINAL
SCR.TR	:	SCREW, TRANSISTOR
SUPRT.PCB	:	SUPPORT, P.C.B.
SURG.PRTCT	:	SURGE PROTECTOR
SW.TACT	:	TACT SWITCH
SW.LEAF	:	LEAF SWITCH
SW.LEVER	:	LEVER SWITCH
SW.MICRO	:	MICRO SWITCH
SW.PUSH	:	PUSH SWITCH
SW.RT.ENC	:	ROTARY ENCODER
SW.RT.MTR	:	ROTARY SWITCH WITH MOTOR
SW.RT	:	ROTARY SWITCH
SW.SLIDE	:	SLIDE SWITCH
TERM.SP	:	SPEAKER TERMINAL
TERM.WRAP	:	WRAPPING TERMINAL
THRMST.CHP	:	CHIP THERMISTOR
TR.CHP	:	CHIP TRANSISTOR
TR.DGT	:	DIGITAL TRANSISTOR
TR.DGT.CHP	:	CHIP DIGITAL TRANSISTOR
TRANS	:	TRANSFORMER
TRANS.PULS	:	PULSE TRANSFORMER
TRANS.PWR	:	POWER TRANSFORMER ASS'y
TUNER.AM	:	TUNER PACK, AM
TUNER.FM	:	TUNER PACK, FM
TUNER.PK	:	FRONT-END TUNER PACK
VR	:	ROTARY POTENTIOMETER
VR.MTR	:	POTENTIOMETER WITH MOTOR
VR.SW	:	POTENTIOMETER WITH ROTARY SW
VR.SLIDE	:	SLIDE POTENTIOMETER
VR.TRIM	:	TRIMMER POTENTIOMETER

Note) Those parts marked with "#" are not included in the P.C.B. ass'y.

P.C.B. DSP

Schm Ref.	PART NO.	Description		
	V3005800	P.C.B.	DSP	
CB1	VQ044200	CN.BS.PIN	6P	
CB3	VQ044500	CN.BS.PIN	11P	
CB6	VQ044600	CN.BS.PIN	13P	
C1	UB245100	C.CE.M.CHP	0.1uF	25V
C2	UB052100	C.CE.M.CHP	100pF	50V
C3	UB052100	C.CE.M.CHP	100pF	50V
C4	UB245100	C.CE.M.CHP	0.1uF	25V
C5	UB052100	C.CE.M.CHP	100pF	50V
C6	UB052100	C.CE.M.CHP	100pF	50V
C7	UB245100	C.CE.M.CHP	0.1uF	25V
C8	VJ900700	C.CE.M.CHP	33pF	50V
C9	UB013100	C.CE.M.CHP	1000pF	50V
C10	UB245100	C.CE.M.CHP	0.1uF	25V
C11	UR818100	C.EL	100uF	6.3V
C12	UB245100	C.CE.M.CHP	0.1uF	25V
C13	UR818100	C.EL	100uF	6.3V
C14	UB245100	C.CE.M.CHP	0.1uF	25V
C20	VJ900700	C.CE.M.CHP	33pF	50V
C21	UB245100	C.CE.M.CHP	0.1uF	25V
C22	UB013470	C.CE.M.CHP	4700pF	50V
C23	VJ900900	C.CE.M.CHP	39pF	50V
C24	UB245100	C.CE.M.CHP	0.1uF	25V
C25	UB245100	C.CE.M.CHP	0.1uF	25V
C26	UB052100	C.CE.M.CHP	100pF	50V
C27	UB052100	C.CE.M.CHP	100pF	50V
C28	UB052100	C.CE.M.CHP	100pF	50V
C29	UB052100	C.CE.M.CHP	100pF	50V
C30	UB052100	C.CE.M.CHP	100pF	50V
C31	UB052100	C.CE.M.CHP	100pF	50V
C32	UB245100	C.CE.M.CHP	0.1uF	25V
C33	UB245100	C.CE.M.CHP	0.1uF	25V
C34	UB245100	C.CE.M.CHP	0.1uF	25V
C35	UB245100	C.CE.M.CHP	0.1uF	25V
C36	UB245100	C.CE.M.CHP	0.1uF	25V
C44	UB245100	C.CE.M.CHP	0.1uF	25V
C45	UB245100	C.CE.M.CHP	0.1uF	25V
C46	UB245100	C.CE.M.CHP	0.1uF	25V
C47	UR818100	C.EL	100uF	6.3V
C48	VJ900700	C.CE.M.CHP	33pF	50V
C49	UB245100	C.CE.M.CHP	0.1uF	25V
C50	UR818330	C.EL	330uF	6.3V
C51	UB245100	C.CE.M.CHP	0.1uF	25V
C52	UR818330	C.EL	330uF	6.3V
C53	UB245100	C.CE.M.CHP	0.1uF	25V
C54	UB245100	C.CE.M.CHP	0.1uF	25V
C55	UR829100	C.EL	1000uF	10V
C56	UR818330	C.EL	330uF	6.3V
C59	UR829100	C.EL	1000uF	10V
C60	UR818100	C.EL	100uF	6.3V
C61	UB012470	C.CE.M.CHP	470pF	50V
C62	UB245100	C.CE.M.CHP	0.1uF	25V
C63	UB245100	C.CE.M.CHP	0.1uF	25V

❋ New Parts

Schm Ref.	PART NO.	Description		
C64	UR818330	C.EL	330uF	6.3V
C65	UB245100	C.CE.M.CHP	0.1uF	25V
C66	UR818330	C.EL	330uF	6.3V
C67	UB245100	C.CE.M.CHP	0.1uF	25V
C68	UB245100	C.CE.M.CHP	0.1uF	25V
C69	UR818330	C.EL	330uF	6.3V
C70	UB245100	C.CE.M.CHP	0.1uF	25V
C71	UR818100	C.EL	100uF	6.3V
C72	UR818100	C.EL	100uF	6.3V
C73	UB245100	C.CE.M.CHP	0.1uF	25V
C74	UR847100	C.EL	10uF	25V
C75	UB245100	C.CE.M.CHP	0.1uF	25V
C76	UR818100	C.EL	100uF	6.3V
C77	UB245100	C.CE.M.CHP	0.1uF	25V
C78	UB245100	C.CE.M.CHP	0.1uF	25V
C79	UB245100	C.CE.M.CHP	0.1uF	25V
C81	UR837470	C.EL	47uF	16V
C82	UR818100	C.EL	100uF	6.3V
C83	UB245100	C.CE.M.CHP	0.1uF	25V
C84	UB245100	C.CE.M.CHP	0.1uF	25V
C85	UB245100	C.CE.M.CHP	0.1uF	25V
C86	UB245100	C.CE.M.CHP	0.1uF	25V
C88	UA953150	C.MYLAR	1500pF	50V
C89	UA953150	C.MYLAR	1500pF	50V
C90	UR847100	C.EL	10uF	25V
C91	UR847100	C.EL	10uF	25V
C92	UR847100	C.EL	10uF	25V
C93	UR847100	C.EL	10uF	25V
C94	UR847100	C.EL	10uF	25V
C95	UR847100	C.EL	10uF	25V
C96	UR847100	C.EL	10uF	25V
C97	UR847100	C.EL	10uF	25V
C98	UR847100	C.EL	10uF	25V
C99	UR847100	C.EL	10uF	25V
C100	UA952100	C.MYLAR	100pF	50V
C101	UA952100	C.MYLAR	100pF	50V
C102	UA952100	C.MYLAR	100pF	50V
C103	UA952100	C.MYLAR	100pF	50V
C104	UR847100	C.EL	10uF	25V
C106	UA952100	C.MYLAR	100pF	50V
C107	UA952100	C.MYLAR	100pF	50V
C109	UR847100	C.EL	10uF	25V
C110	UR847100	C.EL	10uF	25V
C111	UB245100	C.CE.M.CHP	0.1uF	25V
C112	UR818470	C.EL	470uF	6.3V
C113	UR828220	C.EL	220uF	10V
C115	UR847100	C.EL	10uF	25V
C116	UR847100	C.EL	10uF	25V
C117	UR847100	C.EL	10uF	25V
C118	UA952100	C.MYLAR	100pF	50V
C119	UA952100	C.MYLAR	100pF	50V
C120	UR847100	C.EL	10uF	25V
C121	UR847100	C.EL	10uF	25V

❋ New Parts

P.C.B. DSP & VIDEO

Schm Ref.	PART NO.	Description		
C122	UA952100	C.MYLAR	100pF	50V
C123	UR837220	C.EL	22uF	25V
C124	UR847100	C.EL	10uF	25V
C125	UR837220	C.EL	22uF	25V
C126	UA952100	C.MYLAR	100pF	50V
C127	UR847100	C.EL	10uF	25V
C128	UR847100	C.EL	10uF	25V
C129	UR837470	C.EL	47uF	16V
C130	UR837470	C.EL	47uF	16V
C131	UB052100	C.CE.M.CHP	100pF	50V
C132	UB052100	C.CE.M.CHP	100pF	50V
C133	UB052100	C.CE.M.CHP	100pF	50V
C134	UB052100	C.CE.M.CHP	100pF	50V
C135	UB052100	C.CE.M.CHP	100pF	50V
C136	UB052100	C.CE.M.CHP	100pF	50V
C137	UB052100	C.CE.M.CHP	100pF	50V
C138	UB245100	C.CE.M.CHP	0.1uF	25V
C139	UB052100	C.CE.M.CHP	100pF	50V
C140	UB052100	C.CE.M.CHP	100pF	50V
C141	UB052100	C.CE.M.CHP	100pF	50V
D1	VT332900	DIODE	1SS355	
D2	VT332900	DIODE	1SS355	
D3	VT332900	DIODE	1SS355	
D4	VT332900	DIODE	1SS355	
D5	VT332900	DIODE	1SS355	
D6	VT332900	DIODE	1SS355	
D7	VT332900	DIODE	1SS355	
D8	VT332900	DIODE	1SS355	
D9	VT332900	DIODE	1SS355	
D10	VT332900	DIODE	1SS355	
D11	VT332900	DIODE	1SS355	
D12	VT332900	DIODE	1SS355	
D13	VT332900	DIODE	1SS355	
D14	VT332900	DIODE	1SS355	
D15	VT332900	DIODE	1SS355	
D16	VT332900	DIODE	1SS355	
D17	VT332900	DIODE	1SS355	
G1	VR463400	TERM.GND	D3.5 TP00385	
G2	VR463400	TERM.GND	D3.5 TP00385	
G3	VR463400	TERM.GND	D3.5 TP00385	
G4	VR463400	TERM.GND	D3.5 TP00385	
IC1	XR038A00	IC	NJM2904M OP AMP	
IC2	XL091A00	IC	HD74HC02FPEL NOR	
IC3	XG948E00	IC	YM3436DK	
IC4	XV304B00	IC	YSS918D-F	
IC5	XV457A00	IC	M5M51288BKJ-20LTEL	
IC6	XV951A00	IC	AK4526A-VQ	
IC7	XR361A00	IC	AK4320-VM-E1	
IC8	XF291A00	IC	uPC4570G2	
IC9	XF291A00	IC	uPC4570G2	
IC10	XF291A00	IC	uPC4570G2	
IC11	XF291A00	IC	uPC4570G2	
IC13	XF291A00	IC	uPC4570G2	

❋ New Parts

Schm Ref.	PART NO.	Description		
IC14	XV260E00	IC	LC875164A-5K20 CPU	
IC15	XU965A00	IC	uPC29M33T-E1 3.3V	
Q1	VV655300	TR.DGT	DTA144EKA	
Q2	VV655300	TR.DGT	DTA144EKA	
Q3	VV655300	TR.DGT	DTA144EKA	
Q4	VD303700	TR	2SC3326 A,B	
Q5	VD303700	TR	2SC3326 A,B	
Q6	VD303700	TR	2SC3326 A,B	
Q7	VD303700	TR	2SC3326 A,B	
Q8	VD303700	TR	2SC3326 A,B	
Q9	VD303700	TR	2SC3326 A,B	
Q10	VD303700	TR	2SC3326 A,B	
Q11	VD303700	TR	2SC3326 A,B	
Q12	VD303700	TR	2SC3326 A,B	
Q13	VD303700	TR	2SC3326 A,B	
Q14	VV655700	TR.DGT	DTC144EKA	
R30	HV753220	R.CAR.FP	2.2Ω	1/4W
R36	HV753220	R.CAR.FP	2.2Ω	1/4W
R37	HV753220	R.CAR.FP	2.2Ω	1/4W
R39	HV753100	R.CAR.FP	1Ω	1/4W
R43	HV754100	R.CAR.FP	10Ω	1/4W
R44	HV754100	R.CAR.FP	10Ω	1/4W
R45	HV753100	R.CAR.FP	1Ω	1/4W
R47	HV753100	R.CAR.FP	1Ω	1/4W
R114	HV753220	R.CAR.FP	2.2Ω	1/4W
R115	HV753220	R.CAR.FP	2.2Ω	1/4W
XL1	Vi552000	RSNR.CRYS	12.288MHz	
XL2	VQ791000	RSNR.CE	10MHz	
❋	V4120000	P.C.B.	VIDEO(UCRT)	
❋	V4120100	P.C.B.	VIDEO(A)	
❋	V4120200	P.C.B.	VIDEO(BGL)	
❋ CB401	VK025700	CN.BS.PIN	13P	
CB402	Vi878500	CN.BS.PIN	7P	
❋ CB710	VK026400	CN.BS.PIN	5P	
CB711	VK026700	CN.BS.PIN	8P	
C401	UR837330	C.EL	33uF	16V
C402	VG279600	C.CE.TUBLR	3300pF	16V
C403	VF466800	C.CE.TUBLR	100pF	50V
C404	VF466800	C.CE.TUBLR	100pF	50V
C405	UR837100	C.EL	10uF	16V
C406	UR837330	C.EL	33uF	16V
C407	UR829100	C.EL	1000uF	10V
C408	VF466800	C.CE.TUBLR	100pF	50V
C409	VF466800	C.CE.TUBLR	100pF	50V
C410	UR829100	C.EL	1000uF	10V
C411	VF466800	C.CE.TUBLR	100pF	50V
C412	UR837100	C.EL	10uF	16V
C413	UR837100	C.EL	10uF	16V
C414	UR837100	C.EL	10uF	16V
C415	VF466800	C.CE.TUBLR	100pF	50V

❋ New Parts

P.C.B. VIDEO

Schm Ref.	PART NO.	Description		
C416	UR829100	C.EL	1000uF	10V
C417	UR837330	C.EL	33uF	16V
C418	UR829100	C.EL	1000uF	10V
C419	UR837100	C.EL	10uF	16V
C420	UR837220	C.EL	22uF	25V
C421	VJ599100	C.CE.TUBLR	0.1uF	50V
C422	UR837100	C.EL	10uF	16V
C424	UR837100	C.EL	10uF	16V
C425	VJ599100	C.CE.TUBLR	0.1uF	50V
C426	UR837100	C.EL	10uF	16V
C427	UR837100	C.EL	10uF	16V
C429	UR837100	C.EL	10uF	16V
C430	UR837100	C.EL	10uF	16V
C431	VJ599100	C.CE.TUBLR	0.1uF	50V
C432	UR837100	C.EL	10uF	16V
C433	UR839100	C.EL	1000uF	16V
C434	UR837470	C.EL	47uF	16V
C435	VF466900	C.CE.TUBLR	470pF	50V
C436	VJ599100	C.CE.TUBLR	0.1uF	50V
C437	UR866100	C.EL	1uF	50V
C438	VJ599100	C.CE.TUBLR	0.1uF	50V
C439	UR837470	C.EL	47uF	16V
C440	UR866470	C.EL	4.7uF	50V
C441	VG273100	C.CE.TUBLR	6.8pF	50V
C442	VG273100	C.CE.TUBLR	6.8pF	50V
C443	VG276700	C.CE.TUBLR	24pF	50V
C444	VG276700	C.CE.TUBLR	24pF	50V
C445	UR837100	C.EL	10uF	16V
C446	UR818100	C.EL	100uF	6.3V
C447	VG279100	C.CE.TUBLR	1200pF	16V
C448	VF466900	C.CE.TUBLR	470pF	50V
C449	UR866100	C.EL	1uF	50V
C450	UR837100	C.EL	10uF	16V
C451	VJ599100	C.CE.TUBLR	0.1uF	50V
C452	UR837470	C.EL	47uF	16V
C453	UR839100	C.EL	1000uF	16V
C470	VJ599100	C.CE.TUBLR	0.1uF	50V
C471	VJ599100	C.CE.TUBLR	0.1uF	50V
C473	UR837100	C.EL	10uF	16V
C474	UR837100	C.EL	10uF	16V
C475	UR837100	C.EL	10uF	16V
C476	UR837100	C.EL	10uF	16V
C760	UA954100	C.MYLAR	0.01uF	50V(ABGL)
C761	UA954100	C.MYLAR	0.01uF	50V(ABGL)
C762	UA954100	C.MYLAR	0.01uF	50V(ABGL)
C764	UA954220	C.MYLAR	0.022uF	50V(ABGL)
C765	UA954220	C.MYLAR	0.022uF	50V(ABGL)
C775	UA954120	C.MYLAR	0.012uF	50V(ABGL)
C776	UA954120	C.MYLAR	0.012uF	50V(ABGL)
C777	UA954120	C.MYLAR	0.012uF	50V(ABGL)
D401	VM974400	DIODE.ZENR	HZS6B2TD	6.0V
D402	VD631600	DIODE	1SS133,176,HSS104	
D403	VD631600	DIODE	1SS133,176,HSS104	

❋ New Parts

Schm Ref.	PART NO.	Description		
D404	VD631600	DIODE	1SS133,176,HSS104	
D405	VD631600	DIODE	1SS133,176,HSS104	
D406	VD631600	DIODE	1SS133,176,HSS104	
D407	VD631600	DIODE	1SS133,176,HSS104	
D408	VD631600	DIODE	1SS133,176,HSS104	
D409	VD631600	DIODE	1SS133,176,HSS104	
D709	VD631600	DIODE	1SS133,176,HSS104	
D710	VD631600	DIODE	1SS133,176,HSS104	
IC401	iG055100	IC	TC4053BP	
IC402	XH436A00	IC	LA7956	
IC403	XH436A00	IC	LA7956	
IC404	XH436A00	IC	LA7956	
IC405	iG037400	IC	uPD4066BC	
IC406	XS502A00	IC	LC74781-9626	
IC407	XH436A00	IC	LA7956	
IC408	XH436A00	IC	LA7956	
JK401	VP113600	CN.DIN	2P	
JK402	VP113600	CN.DIN	2P	
L401	VG668700	COIL	33uH	
L701	VP575600	COIL	1.5uH	
L702	VP575600	COIL	1.5uH	
L703	VP575600	COIL	1.5uH	
PJ401	VV852500	JACK.PIN	3P	
PJ402	VV325000	JACK.PIN	2P	
Q401	iC174020	TR	2SC1740S R,S	
Q402	VK432900	TR	2SD1915F S,T	
Q407	iC174020	TR	2SC1740S R,S	
Q408	iC1815I0	TR	2SC1815 Y	
Q409	VD678700	TR.DGT	DTC114ES	
Q410	iA1015I0	TR	2SA1015 Y	
Q411	iC053540	TR	2SC535 A,B,C	
Q412	iC224030	TR	2SC2240 GR,BL	
Q413	iA1015I0	TR	2SA1015 Y	
Q414	iA093320	TR	2SA933S Q,R	
Q415	VG721700	TR.DGT	DTA144ES	
Q724	iC174020	TR	2SC1740S R,S	
Q725	iC224030	TR	2SC2240 GR,BL	
R437	VY716000	R.MTL.OXD	270Ω	1W
R440	VY716000	R.MTL.OXD	270Ω	1W
R444	HV753220	R.CAR.FP	2.2Ω	1/4W
R450	HV753220	R.CAR.FP	2.2Ω	1/4W
R459	HV753220	R.CAR.FP	2.2Ω	1/4W
R460	VY716000	R.MTL.OXD	270Ω	1W
R473	HV754100	R.CAR.FP	10Ω	1/4W
R785	HV754100	R.CAR.FP	10Ω	1/4W
R786	HV754100	R.CAR.FP	10Ω	1/4W
R787	HV754100	R.CAR.FP	10Ω	1/4W
RY701	VU566700	RELAY	DG24D2-OS/M	
RY702	VK438300	RELAY	DH24D2-OT/M2	
TE701	V2505000	TERM.SP	6P(UCRTA)	
TE701	V2505100	TERM.SP	6P(BGL)	
XL401	VV949800	RSNR.CRYS	14.31818MHz(UCRT)	
XL401	VV949900	RSNR.CRYS	17.734475MHz(ABGL)	

❋ New Parts

P.C.B. VIDEO & OPERATION

Schm Ref.	PART NO.	Description		
XL401	VV949900	RSNR.CRYS	17.734475MHz	
	V3750200	PIN	L=70	
	V3013900	P.C.B.	OPERATION(L)	
	V3014000	P.C.B.	OPERATION(UCA)	
	V3014100	P.C.B.	OPERATION(RT)	
	V3014300	P.C.B.	OPERATION(BG)	
CB101	Vi878900	CN.BS.PIN	11P	
CB102	VU282700	CN	27P	
CB201	Vi878700	CN.BS.PIN	9P	
CB251	VQ044800	CN.BS.PIN	18P	
CB252	VK026800	CN.BS.PIN	9P	
CB253	VK026500	CN.BS.PIN	6P	
CB254	VK026700	CN.BS.PIN	8P	
CB351	V2508700	CN.PHOT.SN	1P GP1F37R	
CB352	V2508700	CN.PHOT.SN	1P GP1F37R	
CB353	V2508700	CN.PHOT.SN	1P GP1F37R	
CB354	VQ044200	CN.BS.PIN	6P	
CB901	VK026600	CN.BS.PIN	7P	
CB902	VM929900	CN.BS.PIN	15P	
CB951	VQ047100	CN.BS.PIN	7P	
C101	UB045100	C.CE.M.CHP	0.1uF	50V
C102	UR847470	C.EL	47uF	25V
C103	UR866220	C.EL	2.2uF	50V
C104	UR847100	C.EL	10uF	25V
C105	UR866100	C.EL	1uF	50V(LUCABG)
C105	UR866220	C.EL	2.2uF	50V(RT)
C106	UR818100	C.EL	100uF	6.3V
C107	UB045100	C.CE.M.CHP	0.1uF	50V
C108	UB045100	C.CE.M.CHP	0.1uF	50V
C109	VJ900700	C.CE.M.CHP	33pF	50V
C110	UB013100	C.CE.M.CHP	1000pF	50V
C111	UB013100	C.CE.M.CHP	1000pF	50V
C112	UB045100	C.CE.M.CHP	0.1uF	50V
C113	UB045100	C.CE.M.CHP	0.1uF	50V
C114	UR857100	C.EL	10uF	35V
C115	UB045100	C.CE.M.CHP	0.1uF	50V
C116	UR818330	C.EL	330uF	6.3V
C201	VG287800	C.EL	330uF	16V
C202	VG287800	C.EL	330uF	16V
C203	UR837220	C.EL	22uF	25V
C204	UR837220	C.EL	22uF	25V
C205	UR866100	C.EL	1uF	50V
C206	UR865100	C.EL	0.1uF	50V
C207	UR865100	C.EL	0.1uF	50V
C208	UR837470	C.EL	47uF	16V
C209	UA655120	C.MYLAR	0.12uF	50V
C210	VK533800	C.PP	47pF	200V
C211	UR866220	C.EL	2.2uF	50V
C212	VK533800	C.PP	47pF	200V
C213	UR866220	C.EL	2.2uF	50V

❋ New Parts

Schm Ref.	PART NO.	Description		
C214	UA655120	C.MYLAR	0.12uF	50V
C215	UR837470	C.EL	47uF	16V
C216	UR865100	C.EL	0.1uF	50V
C217	UR865100	C.EL	0.1uF	50V
C218	UR866100	C.EL	1uF	50V
C219	UR847100	C.EL	10uF	25V
C220	VQ645600	C.MYLAR	100pF	50V
C221	VQ645600	C.MYLAR	100pF	50V
C222	UR847100	C.EL	10uF	25V
C223	UA954330	C.MYLAR	0.033uF	50V
C224	UA954330	C.MYLAR	0.033uF	50V
C251	UA952100	C.MYLAR	100pF	50V
C252	UA952100	C.MYLAR	100pF	50V
C253	UR866220	C.EL	2.2uF	50V
C254	UR866220	C.EL	2.2uF	50V
C255	UR866220	C.EL	2.2uF	50V
C256	UR818100	C.EL	100uF	6.3V
C257	UR818100	C.EL	100uF	6.3V
C258	UR866220	C.EL	2.2uF	50V
C259	UR866220	C.EL	2.2uF	50V
C260	UR818100	C.EL	100uF	6.3V
C261	UR818100	C.EL	100uF	6.3V
C262	UR866220	C.EL	2.2uF	50V
C263	UN866100	C.EL	1uF	50V
C265	UA952100	C.MYLAR	100pF	50V
C266	UR818100	C.EL	100uF	6.3V
C267	UA952100	C.MYLAR	100pF	50V
C268	UR818100	C.EL	100uF	6.3V
C270	UR847100	C.EL	10uF	25V
C271	VG287600	C.EL	100uF	25V
C272	UA952100	C.MYLAR	100pF	50V
C273	UA952100	C.MYLAR	100pF	50V
C274	VG287600	C.EL	100uF	25V
C275	UR847100	C.EL	10uF	25V
C276	UA952100	C.MYLAR	100pF	50V
C277	UA952100	C.MYLAR	100pF	50V
C278	UB045100	C.CE.M.CHP	0.1uF	50V
C279	UR866470	C.EL	4.7uF	50V
C280	UB045100	C.CE.M.CHP	0.1uF	50V
C281	UB045100	C.CE.M.CHP	0.1uF	50V
C282	UR866470	C.EL	4.7uF	50V
C283	UR866470	C.EL	4.7uF	50V
C284	UB045100	C.CE.M.CHP	0.1uF	50V
C285	UB045100	C.CE.M.CHP	0.1uF	50V
C286	UR866470	C.EL	4.7uF	50V
C287	UR847100	C.EL	10uF	25V
C288	UR838100	C.EL	100uF	16V
C289	UR838100	C.EL	100uF	16V
C290	UR847100	C.EL	10uF	25V
C291	UR847100	C.EL	10uF	25V
C292	UR847100	C.EL	10uF	25V
C293	UR847100	C.EL	10uF	25V
C294	UR847100	C.EL	10uF	25V

❋ New Parts

P.C.B. OPERATION

Schm Ref.	PART NO.	Description		
C351	UB051220	C.CE.M.CHP	22pF	50V
C352	UB045100	C.CE.M.CHP	0.1uF	50V
C353	UB045100	C.CE.M.CHP	0.1uF	50V
C354	UB045100	C.CE.M.CHP	0.1uF	50V
C355	UB045100	C.CE.M.CHP	0.1uF	50V
C356	UR847220	C.EL	22uF	25V
C357	UB012220	C.CE.M.CHP	220pF	50V
C358	UB051100	C.CE.M.CHP	10pF	50V
C359	UB013100	C.CE.M.CHP	1000pF	50V
C360	UB045100	C.CE.M.CHP	0.1uF	50V
C361	UB045100	C.CE.M.CHP	0.1uF	50V
C362	UR818100	C.EL	100uF	6.3V
C363	UB045100	C.CE.M.CHP	0.1uF	50V
C901	UB044100	C.CE.M.CHP	0.01uF	50V
C902	UB012220	C.CE.M.CHP	220pF	50V
C903	UB012220	C.CE.M.CHP	220pF	50V
C904	UB012220	C.CE.M.CHP	220pF	50V
C905	UB012220	C.CE.M.CHP	220pF	50V
C906	UB012220	C.CE.M.CHP	220pF	50V
C907	UB012220	C.CE.M.CHP	220pF	50V
C951	UB045100	C.CE.M.CHP	0.1uF	50V
C952	UB045100	C.CE.M.CHP	0.1uF	50V
C953	VF466800	C.CE.TUBLR	100pF	50V
C954	VF466800	C.CE.TUBLR	100pF	50V
D101	VD631600	DIODE	1SS133,176,HSS104	
D102	VM974400	DIODE.ZENR	HZS6B2TD(UCABGL)	
D102	VM974500	DIODE.ZENR	HZS6C2TD 6.0V(RT)	
D103	VM974700	DIODE.ZENR	HZS7B2TD 7.0V	
D104	VV625100	LED(re)	SIM-22ST(UCA)	
D105	VD631600	DIODE	1SS133,176,HSS104	
D106	VD631600	DIODE	1SS133,176,HSS104	
D107	VD631600	DIODE	1SS133,176,HSS104	
D108	VD631600	DIODE	1SS133,176,HSS104	
D109	VM974100	DIODE.ZENR	HZS5B2TD 5.0V	
D252	VM974100	DIODE.ZENR	HZS5B2TD 5.0V	
D351	VT332900	DIODE	1SS355	
D352	VT332900	DIODE	1SS355	
G101	VR463400	TERM.GND	D3.5 TP00385	
IC101	XJ757A00	IC	NJM78L05A-T3	
IC102	XR188A00	IC	LC75710NE(LUCART)	
IC102	XV160A00	IC	LC75712E FLD(BG)	
IC201	XM356A00	IC	NJM2068LD	
IC202	XB247A00	IC	uPC4570HA	
IC251	XF291A00	IC	uPC4570G2	
IC252	XF291A00	IC	uPC4570G2	
IC253	XF291A00	IC	uPC4570G2	
IC254	XF494A00	IC	LB1641	
IC255	XR040A00	IC	TC9299P	
IC256	XR040A00	IC	TC9299P	
IC257	XF291A00	IC	uPC4570G2	
IC258	XF291A00	IC	uPC4570G2	
IC351	iG142200	IC	TC74HCU04AP	
IC352	iR000010	IC	HD74HC00P 2IN NAND	

❋ New Parts

Schm Ref.	PART NO.	Description		
IC353	XT208A00	IC	HD74HC153P MPX	
JK901	VJ726800	JACK.MNI	(UCA)	
JK902	VJ726800	JACK.MNI	(UCA)	
JK951	V2589500	CN	1P	
L351	GE901970	COIL	68uH	
L352	GE901970	COIL	68uH	
L353	GE901970	COIL	68uH	
PJ351	VY667700	JACK.PIN	1P	
PJ901	V2874800	JACK.PIN	6P	
PJ951	VR406000	JACK.PIN	3P	
Q101	VV556500	TR	2SA1037K Q,R,S	
Q102	VV556500	TR	2SA1037K Q,R,S	
Q103	VV556500	TR	2SA1037K Q,R,S	
Q104	VV655700	TR.DGT	DTC144EKA	
Q105	VV556400	TR	2SC2412K Q,R,S	
Q106	VV556400	TR	2SC2412K Q,R,S	
Q107	VV556400	TR	2SC2412K Q,R,S	
Q251	VV655700	TR.DGT	DTC144EKA	
R148	HV755560	R.CAR.FP	560Ω	1/4W
R229	VP939800	R.MTL.OXD	10Ω	1W
R230	VP939800	R.MTL.OXD	10Ω	1W
R280	HV754100	R.CAR.FP	10Ω	1/4W
R281	HV754100	R.CAR.FP	10Ω	1/4W
R282	HV754100	R.CAR.FP	10Ω	1/4W
R359	HV753220	R.CAR.FP	2.2Ω	1/4W
SW101	VG392900	SW.TACT	SKHVAA	
SW102	VG392900	SW.TACT	SKHVAA	
SW103	VG392900	SW.TACT	SKHVAA	
SW104	VG392900	SW.TACT	SKHVAA(BG)	
SW105	VG392900	SW.TACT	SKHVAA(BG)	
SW106	VG392900	SW.TACT	SKHVAA(BG)	
SW107	VG392900	SW.TACT	SKHVAA	
SW108	VG392900	SW.TACT	SKHVAA	
SW109	VG392900	SW.TACT	SKHVAA	
SW110	VG392900	SW.TACT	SKHVAA(BG)	
SW111	VG392900	SW.TACT	SKHVAA	
SW112	VG392900	SW.TACT	SKHVAA	
SW113	VG392900	SW.TACT	SKHVAA	
SW114	VG392900	SW.TACT	SKHVAA	
SW115	VG392900	SW.TACT	SKHVAA	
SW116	VG392900	SW.TACT	SKHVAA	
SW117	VG392900	SW.TACT	SKHVAA	
SW118	VG392900	SW.TACT	SKHVAA	
SW119	VG392900	SW.TACT	SKHVAA	
SW120	VG392900	SW.TACT	SKHVAA	
SW121	VG392900	SW.TACT	SKHVAA	
SW122	VG392900	SW.TACT	SKHVAA	
SW123	VG392900	SW.TACT	SKHVAA	
SW124	VG392900	SW.TACT	SKHVAA	
SW125	VG392900	SW.TACT	SKHVAA	
SW126	VG392900	SW.TACT	SKHVAA	
SW127	VT140300	SW.RT.ENC	EC16B12204	
SW128	VG392900	SW.TACT	SKHVAA	

❋ New Parts

P.C.B. OPERATION & INPUT

Schm Ref.	PART NO.	Description		
SW129	VG392900	SW.TACT	SKHVAA	
SW130	VG392900	SW.TACT	SKHVAA	
SW201	VV885000	SW.PUSH	SPUN22 2	
SW901	VS602600	SW.SLIDE	SS070-P022 A(RT)	
SW902	VS602600	SW.SLIDE	SS070-P022 A	
U101	VU591000	L.DTCT	GP1U271X	
V101	V2573800	FL.DSPLY	16-BT-60GK	
VR201	VP741800	VR	B20KΩ	
VR202	VP741900	VR	G25KΩ	
VR203	VP742000	VR	MN100KΩ	
VR251	V2556700	VR.MTR	A100KΩ	
	VJ828000	PIN	IMSA-6024-03E	
	VS588900	SHEET		
	V3422300	SPACER	FL-WIDE	
	VY760000	SPACER.LED	(UCA)	
	BB071360	SCR.TERM	8.3x13	
❋	V4221600	P.C.B.	INPUT(UC)	
❋	V4221700	P.C.B.	INPUT(RT)	
❋	V4221800	P.C.B.	INPUT(A)	
❋	V4221900	P.C.B.	INPUT(B)	
❋	V4222000	P.C.B.	INPUT(G)	
❋	V4222100	P.C.B.	INPUT(L)	
CB11	VQ047100	CN.BS.PIN	7P	
CB12	Vi879100	CN.BS.PIN	13P	
CB13	VM923600	CN.BS.PIN	13P	
CB14	VM859600	CN.BS.PIN	15P	
CB15	VQ963700	CN.BS.PIN	16P	
CB16	VP573800	CN.BS.PIN	18P	
CB17	VM859500	CN.BS.PIN	11P	
CB18	VQ047800	CN.BS.PIN	27P	
CB19	Vi879000	CN.BS.PIN	12P	
CB821	VK024700	CN.BS.PIN	3P	
CB822	VP206500	HOLDER.FUS	EYF-52BC(G)	
⚠ CB823	VG879900	CN.BS.PIN	2P	
CB824	VP206500	HOLDER.FUS	EYF-52BC(ABGL)	
CB825	VP206500	HOLDER.FUS	EYF-52BC(G)	
CB826	VP206500	HOLDER.FUS	EYF-52BC(ABGL)	
CB827	VP206500	HOLDER.FUS	EYF-52BC(UCRT)	
CB828	VP206500	HOLDER.FUS	EYF-52BC(UCRT)	
CB851	VP206500	HOLDER.FUS	EYF-52BC(RT)	
CB852	VP206500	HOLDER.FUS	EYF-52BC(RT)	
C11	UA952100	C.MYLAR	100pF	50V(ABGL)
C12	UB044100	C.CE.M.CHP	0.01uF	50V
C13	UA952100	C.MYLAR	100pF	50V(ABGL)
C14	VK533900	C.PP	100pF	200V
C15	VK533900	C.PP	100pF	200V
C16	UB052100	C.CE.M.CHP	100pF	50V
C17	UB052100	C.CE.M.CHP	100pF	50V
C18	UA952100	C.MYLAR	100pF	50V(UCRTAL)
C18	VK533800	C.PP	47pF	200V(BG)

❋ New Parts

Schm Ref.	PART NO.	Description		
C19	UA952100	C.MYLAR	100pF	50V(UCRTAL)
C19	VK533800	C.PP	47pF	200V(BG)
C20	VK533900	C.PP	100pF	200V
C21	VK533900	C.PP	100pF	200V
C22	UB052100	C.CE.M.CHP	100pF	50V
C23	UB052100	C.CE.M.CHP	100pF	50V
C24	UB052100	C.CE.M.CHP	100pF	50V
C25	UB052100	C.CE.M.CHP	100pF	50V
C26	UA952100	C.MYLAR	100pF	50V(UCRTAL)
C26	VK533800	C.PP	47pF	200V(BG)
C27	UA952100	C.MYLAR	100pF	50V(UCRTAL)
C27	VK533800	C.PP	47pF	200V(BG)
C28	UR866220	C.EL	2.2uF	50V
C29	UR866220	C.EL	2.2uF	50V
C30	UA952220	C.MYLAR	220pF	50V
C31	UR828220	C.EL	220uF	10V
C32	UR837470	C.EL	47uF	16V
C33	UA953100	C.MYLAR	1000pF	50V
C34	UA653910	C.MYLAR	9100pF	50V
C35	UA954330	C.MYLAR	0.033uF	50V
C36	UA653910	C.MYLAR	9100pF	50V
C37	UA954330	C.MYLAR	0.033uF	50V
C38	UA953100	C.MYLAR	1000pF	50V
C39	UA952220	C.MYLAR	220pF	50V
C40	UR828220	C.EL	220uF	10V
C41	UR837470	C.EL	47uF	16V
C42	UR866220	C.EL	2.2uF	50V
C43	UR866220	C.EL	2.2uF	50V
C44	UR837100	C.EL	10uF	16V(BG)
C45	UR837100	C.EL	10uF	16V(BG)
C47	UR837100	C.EL	10uF	16V
C48	UA952100	C.MYLAR	100pF	50V
C49	UA952100	C.MYLAR	100pF	50V
C50	UR837100	C.EL	10uF	16V
C51	UA954180	C.MYLAR	0.018uF	50V
C53	UR837220	C.EL	22uF	25V
C54	VQ083000	C.EL	47uF	16V
C57	VQ083000	C.EL	47uF	16V
C58	UR837220	C.EL	22uF	25V
C60	UR837220	C.EL	22uF	25V
C61	UR847100	C.EL	10uF	25V
C62	VG287500	C.EL	47uF	50V
C63	VG287500	C.EL	47uF	50V
C64	UR847100	C.EL	10uF	25V
C65	UR837220	C.EL	22uF	25V
C66	UB245100	C.CE.M.CHP	0.1uF	25V
C67	UB245100	C.CE.M.CHP	0.1uF	25V
C68	UR837220	C.EL	22uF	25V
C69	UR837220	C.EL	22uF	25V
C70	UR837220	C.EL	22uF	25V
C71	UR837220	C.EL	22uF	25V
C72	UA952100	C.MYLAR	100pF	50V
C73	UA952100	C.MYLAR	100pF	50V

❋ New Parts

P.C.B. INPUT & MAIN

Schm Ref.	PART NO.	Description		
C74	UA954270	C.MYLAR	0.027uF	50V
C75	UA954270	C.MYLAR	0.027uF	50V
C76	UR847100	C.EL	10uF	25V
C77	UR847100	C.EL	10uF	25V
C78	UA954270	C.MYLAR	0.027uF	50V
C79	UA954270	C.MYLAR	0.027uF	50V
C80	UB245100	C.CE.M.CHP	0.1uF	25V
C81	UB245100	C.CE.M.CHP	0.1uF	25V
C82	UB044100	C.CE.M.CHP	0.01uF	50V
C83	UB044100	C.CE.M.CHP	0.01uF	50V
C84	UB245100	C.CE.M.CHP	0.1uF	25V
C85	UB245100	C.CE.M.CHP	0.1uF	25V
C86	UR837100	C.EL	10uF	16V
C87	VG288800	C.EL	47uF	50V
C88	UA952100	C.MYLAR	100pF	50V
C89	UR837470	C.EL	47uF	16V
C90	VG288800	C.EL	47uF	50V
C91	UR837470	C.EL	47uF	16V
C92	UA952100	C.MYLAR	100pF	50V
C93	UR837100	C.EL	10uF	16V
C94	UB245100	C.CE.M.CHP	0.1uF	25V
C95	UB245100	C.CE.M.CHP	0.1uF	25V
C96	UB245100	C.CE.M.CHP	0.1uF	25V
C101	UR819220	C.EL	2200uF	6.3V
C102	UB245100	C.CE.M.CHP	0.1uF	25V
C103	VT180400	C.EL	4700uF	5.5V
C104	UB245100	C.CE.M.CHP	0.1uF	25V
C105	UB044100	C.CE.M.CHP	0.01uF	50V
C107	UA954680	C.MYLAR	0.068uF	50V
C108	UR818220	C.EL	220uF	6.3V
C109	UN866220	C.EL	2.2uF	50V
C110	UR818470	C.EL	470uF	6.3V
C111	UB245100	C.CE.M.CHP	0.1uF	25V
C821	UA953100	C.MYLAR	1000pF	50V(RT)
C822	VJ599100	C.CE.TUBLR	0.1uF	50V
C823	UR848330	C.EL	330uF	25V(RTABGL)
C823	UR848470	C.EL	470uF	25V(UC)
C824	UA954100	C.MYLAR	0.01uF	50V
C825	UR858100	C.EL	100uF	35V(RT)
C826	Vi716700	C.MYLAR	0.01uF	50V
C827	VS741700	C.CE.SAFTY	0.01uF	275V
C828	UR858100	C.EL	100uF	35V(RT)
D11	VT332900	DIODE	1SS355	
D12	VT332900	DIODE	1SS355	
D13	VU171900	DIODE.ZENR	UDZ5.1B	5.1V
D14	VT332900	DIODE	1SS355	
D15	VT332900	DIODE	1SS355	
D16	VT332900	DIODE	1SS355	
D17	VT332900	DIODE	1SS355	
D18	VU171900	DIODE.ZENR	UDZ5.1B	5.1V
D19	VU172600	DIODE.ZENR	UDZS10B	10V
D20	VU172600	DIODE.ZENR	UDZS10B	10V
D21	VU172600	DIODE.ZENR	UDZS10B	10V

❋ New Parts

Schm Ref.	PART NO.	Description	
D22	VU172600	DIODE.ZENR	UDZS10B 10V
D821	VD631600	DIODE	1SS133,176,HSS104
D822	VR253700	DIODE.BRG	S1NB20 1.0A 200V
D823	VM975600	DIODE.ZENR	HZS12B2TD12V(RT)
F822	KB000790	FUSE	T4.0A 250V(ABGL)
F823	VS823300	FUSE	T8.0A 125V(UCRT)
F851	KB000790	FUSE	T4.0A 250V(RT)
G11	VR463400	TERM.GND	D3.5 TP00385
HS1	V2984900	HEAT.SINK	PUH16-25(RT)
IC11	XJ553A00	IC	NJM2068MD
IC12	XF291A00	IC	uPC4570G2
IC13	XV039A00	IC	M5220FP OP AMP
IC15	XV039A00	IC	M5220FP OP AMP
IC16	XV039A00	IC	M5220FP OP AMP
IC17	XP894A00	IC	LC78211
IC18	XP896A00	IC	LC78213
IC19	XP895A00	IC	LC78212
IC20	XF291A00	IC	uPC4570G2(BG)
IC21	XV288C00	IC	HD6433397XXXF CPU
PJ11	VQ260900	JACK.PIN	4P
PJ12	VU857800	JACK.PIN	6P
PJ13	VU857800	JACK.PIN	6P
Q11	VV655300	TR.DGT	DTA144EKA
Q12	VV655700	TR.DGT	DTC144EKA
Q13	VV655700	TR.DGT	DTC144EKA
Q821	iC174020	TR	2SC1740S R,S
Q822	VR510800	TR	2SD2396 J,K(RT)
R55	HV755100	R.CAR.FP	100Ω 1/4W
R62	VP939600	R.MTL.FLM	2.2Ω 1W
R63	VP939600	R.MTL.FLM	2.2Ω 1W
R120	VP940600	R.MTL.OXD	220Ω 1W
R123	VP940600	R.MTL.OXD	220Ω 1W
R822	HV756560	R.CAR.FP	5.6KΩ 1/4W(RT)
R823	HV756560	R.CAR.FP	5.6KΩ 1/4W(RT)
RY821	V2695300	RELAY	DC DG12D1-O/M-(UC)
RY821	V2712300	RELAY	DC SDT-S(RTABGL)
SW851	VA961800	VOLT.SELCT	ESE-37247-F(RT)
T821	XC083A00	TRANS.PWR	(UC)
T821	XC084A00	TRANS.PWR	(ABGL)
T821	XT331A00	TRANS.PWR	(RT)
TE821	VT915000	OUTLET.AC	2P(A)
TE821	VU543100	OUTLET.AC	2P(UCRT)
TE821	VU543300	OUTLET.AC	1P(B)
TE821	VU543400	OUTLET.AC	2P(GL)
XL11	VJ802400	RSNR.CE	8MHz
	VJ828000	PIN	IMSA-6024-03E
	VR264300	PLATE.GND	
	EP600140	SCR.BND.HD	3x10 MFZN2-BL(RT)
	V4108400	P.C.B.	MAIN(UCRT)
	V4108500	P.C.B.	MAIN(A)

❋ New Parts

P.C.B. MAIN

Schm Ref.	PART NO.	Description		
❋	V4108600	P.C.B.	MAIN(BGL)	
CB501	Vi878400	CN.BS.PIN	6P	
CB502	VK025500	CN.BS.PIN	11P	
CB521	VQ584700	CN.BS.PIN	5P	
CB522	VQ584700	CN.BS.PIN	5P	
CB523	VQ584800	CN.BS.PIN	6P	
CB524	VQ584800	CN.BS.PIN	6P	
CB525	Vi878400	CN.BS.PIN	6P	
CB526	Vi878100	CN.BS.PIN	3P	
CB527	Vi878300	CN.BS.PIN	5P	
CB529	LA002110	TERM.WRAP	2P	
CB530	LA002110	TERM.WRAP	2P	
CB531	LA002110	TERM.WRAP	2P	
CB533	VQ584700	CN.BS.PIN	5P	
CB702	Vi878600	CN.BS.PIN	8P	
CB703	VK025600	CN.BS.PIN	12P	
CB704	VQ585500	CN.JUMPER	5P	
CB705	VK025100	CN.BS.PIN	7P	
CB706	VB389900	CN.BS.PIN	3P	
CB707	VB389800	CN.BS.PIN	2P	
CB708	VK026500	CN.BS.PIN	6P	
CB709	Vi878500	CN.BS.PIN	7P	
CB712	Vi878600	CN.BS.PIN	8P	
C501	UR866470	C.EL	4.7uF	50V
C503	UR847100	C.EL	10uF	25V
C504	UR847100	C.EL	10uF	25V
C505	UR818100	C.EL	100uF	6.3V
C506	VK399200	C.MYLAR.ML	0.39uF	50V
C507	UR866470	C.EL	4.7uF	50V
C508	FU452100	C.MICA	100pF	500V
C509	VQ645600	C.MYLAR	100pF	50V
C510	FU452100	C.MICA	100pF	500V
C511	VQ645600	C.MYLAR	100pF	50V
C512	UA952100	C.MYLAR	100pF	50V
C513	UR847100	C.EL	10uF	25V
C514	UA952100	C.MYLAR	100pF	50V
C515	UR847100	C.EL	10uF	25V
C516	VK399200	C.MYLAR.ML	0.39uF	50V
C517	FU451330	C.MICA	33pF	500V
C518	UR838100	C.EL	100uF	16V
C519	UA953100	C.MYLAR	1000pF	50V
C520	FU451330	C.MICA	33pF	500V
C521	UR838100	C.EL	100uF	16V
C522	UA953100	C.MYLAR	1000pF	50V
C523	FU451330	C.MICA	33pF	500V
C524	UR837470	C.EL	47uF	16V
C525	UA953100	C.MYLAR	1000pF	50V
C526	VK533900	C.PP	100pF	200V
C527	UR867470	C.EL	47uF	50V
C528	UR867470	C.EL	47uF	50V
C529	VK533900	C.PP	100pF	200V
C530	VK347900	C.EL	470uF	63V
C531	VK533900	C.PP	100pF	200V

❋ New Parts

Schm Ref.	PART NO.	Description		
C532	UR867470	C.EL	47uF	50V
C533	UR867470	C.EL	47uF	50V
C534	VK533900	C.PP	100pF	200V
C535	VR325000	C.MYLAR	100pF	100V
C536	UR867470	C.EL	47uF	50V
C537	UR867470	C.EL	47uF	50V
C538	VR325000	C.MYLAR	100pF	100V
C541	UR866100	C.EL	1uF	50V
C542	UA954680	C.MYLAR	0.068uF	50V
C543	UA954680	C.MYLAR	0.068uF	50V
C544	UA954680	C.MYLAR	0.068uF	50V
C545	UA954100	C.MYLAR	0.01uF	50V(ABGL)
C546	UA954220	C.MYLAR	0.022uF	50V(ABGL)
C547	UA954220	C.MYLAR	0.022uF	50V(ABGL)
C548	UA954220	C.MYLAR	0.022uF	50V(ABGL)
C549	UA954220	C.MYLAR	0.022uF	50V(ABGL)
C550	UA954220	C.MYLAR	0.022uF	50V(ABGL)
C551	UA954220	C.MYLAR	0.022uF	50V(ABGL)
⚠ C552	V2922200	C.EL	12000uF	63V
⚠ C553	V2922200	C.EL	12000uF	63V
C554	UA954100	C.MYLAR	0.01uF	50V(ABGL)
C555	UA954100	C.MYLAR	0.01uF	50V
C556	VS745400	C.POL.MTL	0.1uF	100V
C557	VS745400	C.POL.MTL	0.1uF	100V
C701	UR866470	C.EL	4.7uF	50V
C703	UR866470	C.EL	4.7uF	50V
C704	UR837470	C.EL	47uF	16V
C705	UR837470	C.EL	47uF	16V
C706	UR847100	C.EL	10uF	25V
C711	UA952100	C.MYLAR	100pF	50V
C712	UA952470	C.MYLAR	470pF	50V
C713	UR837470	C.EL	47uF	16V
C714	UA952470	C.MYLAR	470pF	50V
C715	UA952100	C.MYLAR	100pF	50V
C716	UR847100	C.EL	10uF	25V
C717	UR837470	C.EL	47uF	16V
C718	UR847100	C.EL	10uF	25V
C719	VR516400	C.CE	15pF	500V
C720	UR837470	C.EL	47uF	16V
C721	UA953100	C.MYLAR	1000pF	50V
C722	UA953100	C.MYLAR	1000pF	50V
C723	UR837470	C.EL	47uF	16V
C724	VR516400	C.CE	15pF	500V
C725	UR837470	C.EL	47uF	16V
C726	UR847100	C.EL	10uF	25V
C727	UR857470	C.EL	47uF	35V
C728	VR325000	C.MYLAR	100pF	100V
C729	UR867470	C.EL	47uF	50V
C730	UR867470	C.EL	47uF	50V
C731	VR325000	C.MYLAR	100pF	100V
C732	UR878100	C.EL	100uF	63V
C733	UR878100	C.EL	100uF	63V
C734	VR325000	C.MYLAR	100pF	100V

❋ New Parts

P.C.B. MAIN

Schm Ref.	PART NO.	Description	
C735	UR867470	C.EL	47uF 50V
C736	UR867470	C.EL	47uF 50V
C737	VR325000	C.MYLAR	100pF 100V
C738	UR857470	C.EL	47uF 35V
C739	UR848470	C.EL	470uF 25V
C740	UR865470	C.EL	0.47uF 50V
C741	UR847100	C.EL	10uF 25V
C742	UR867100	C.EL	10uF 50V
C743	UR837100	C.EL	10uF 16V
C744	UA954680	C.MYLAR	0.068uF 50V
C745	UR877470	C.EL	47uF 63V
C746	UA954680	C.MYLAR	0.068uF 50V
C747	UR877470	C.EL	47uF 63V
C748	UR858470	C.EL	470uF 35V
⚠ C749	UR768470	C.EL	470uF 50V
⚠ C750	UR768470	C.EL	470uF 50V
⚠ C751	UR749680	C.EL	6800uF 25V
⚠ C752	UR749220	C.EL	2200uF 25V
⚠ C753	UR749470	C.EL	4700uF 25V
C754	VF466900	C.CE.TUBLR	470pF 50V
C755	VF466900	C.CE.TUBLR	470pF 50V
C756	UA655100	C.MYLAR	0.1uF 50V
C757	VF466900	C.CE.TUBLR	470pF 50V
C758	VF466900	C.CE.TUBLR	470pF 50V
C759	VF466900	C.CE.TUBLR	470pF 50V
C763	VJ599100	C.CE.TUBLR	0.1uF 50V
C766	VS745400	C.POL.MTL	0.1uF 100V
C767	VS745400	C.POL.MTL	0.1uF 100V
C768	VE326400	C.MYLAR.ML	0.22uF 50V
C769	VE326400	C.MYLAR.ML	0.22uF 50V
C770	VJ599100	C.CE.TUBLR	0.1uF 50V
C771	VS745400	C.POL.MTL	0.1uF 100V
C772	VJ599100	C.CE.TUBLR	0.1uF 50V
C773	VE326400	C.MYLAR.ML	0.22uF 50V
C774	VE326400	C.MYLAR.ML	0.22uF 50V
C775	VF467000	C.CE.TUBLR	1000pF 50V
D501	VM976500	DIODE.ZENR	HZS302TD 30V
D502	VD631600	DIODE	1SS133,176,HSS104
D506	VN008700	DIODE	1SS270A
D507	VN008700	DIODE	1SS270A
D508	VN008700	DIODE	1SS270A
⚠ D510	VN011400	DIODE.BRG	D5SB20 5A 200V
D511	VD631600	DIODE	1SS133,176,HSS104
D513	VM975700	DIODE.ZENR	HZS12C2TD 12V
D701	VM975700	DIODE.ZENR	HZS12C2TD 12V
⚠ D702	VM974900	DIODE.ZENR	HZS9A2TD 9.0V
⚠ D703	VM974900	DIODE.ZENR	HZS9A2TD 9.0V
⚠ D704	VM974900	DIODE.ZENR	HZS9A2TD 9.0V
⚠ D705	VM974900	DIODE.ZENR	HZS9A2TD 9.0V
D706	VM976300	DIODE.ZENR	HZS242TD 24V
D707	VN008700	DIODE	1SS270A
D708	VN008700	DIODE	1SS270A
⚠ D711	VM974900	DIODE.ZENR	HZS9A2TD 9.0V

❋ New Parts

Schm Ref.	PART NO.	Description	
⚠ D712	VM974900	DIODE.ZENR	HZS9A2TD 9.0V
⚠ D713	VR253700	DIODE.BRG	S1NB20 1.0A 200V
⚠ D714	VR253700	DIODE.BRG	S1NB20 1.0A 200V
⚠ D715	VR253700	DIODE.BRG	S1NB20 1.0A 200V
HS501	VS606000	HEAT.SINK	DPS35-45
⚠ IC701	XJ608A00	IC	NJM7812FA
⚠ IC703	XJ608A00	IC	NJM7812FA
⚠ IC704	XJ607A00	IC	NJM7805FA 5V
⚠ IC705	XD343A00	IC	NJM79M12FA
JK501	V2700900	JACK.PHONE	JY-6317-03-030GD
L501	VU038200	COIL	0.95uH
L502	VU038200	COIL	0.95uH
PJ701	V2874800	JACK.PIN	6P
Q502	VK432900	TR	2SD1915F S,T
Q504	VK432900	TR	2SD1915F S,T
Q505	VK432900	TR	2SD1915F S,T
Q506	iA1015I0	TR	2SA1015 Y
Q507	VP883000	TR	2SA893A D,E
Q508	VP883000	TR	2SA893A D,E
Q509	VP883000	TR	2SA893A D,E
Q510	iC224030	TR	2SC2240 GR,BL
Q511	VP883000	TR	2SA893A D,E
Q512	VP883000	TR	2SA893A D,E
Q513	VP883000	TR	2SA893A D,E
⚠ Q514	iC224030	TR	2SC2240 GR,BL
⚠ Q515	VR325600	TR	2SC2229 O,Y
⚠ Q516	iC224030	TR	2SC2240 GR,BL
⚠ Q517	VR325600	TR	2SC2229 O,Y
⚠ Q518	iC224030	TR	2SC2240 GR,BL
⚠ Q519	VR325600	TR	2SC2229 O,Y
⚠ Q522	iP011600	TR.PAIR	2SA1358/C3421 O,Y
⚠ Q523	VY760300	TR.PAIR	2SA1492/C3856 OPY
⚠ Q526	iP011600	TR.PAIR	2SA1358/C3421 O,Y
⚠ Q527	VY760300	TR.PAIR	2SA1492/C3856 OPY
⚠ Q530	iP011600	TR.PAIR	2SA1358/C3421 O,Y
⚠ Q531	VY760300	TR.PAIR	2SA1492/C3856 OPY
Q534	iA097030	TR	2SA970 GR,BL
⚠ Q535	VP883100	TR	2SC1890A D,E
⚠ Q536	VP883100	TR	2SC1890A D,E
⚠ Q537	VP883100	TR	2SC1890A D,E
Q538	iC174020	TR	2SC1740S R,S
Q540	VK432900	TR	2SD1915F S,T
Q541	VK432900	TR	2SD1915F S,T
Q701	VK432900	TR	2SD1915F S,T
Q702	VK432900	TR	2SD1915F S,T
⚠ Q703	VP883000	TR	2SA893A D,E
⚠ Q704	VP883000	TR	2SA893A D,E
⚠ Q705	VP883000	TR	2SA893A D,E
⚠ Q706	VP883000	TR	2SA893A D,E
⚠ Q707	iP011600	TR.PAIR	2SA1358/C3421 O,Y
⚠ Q708	iC224030	TR	2SC2240 GR,BL
⚠ Q710	VR325600	TR	2SC2229 O,Y
⚠ Q711	VR325600	TR	2SC2229 O,Y

❋ New Parts

P.C.B. MAIN & TUNER

	Schm Ref.	PART NO.	Description		
⚠	Q712	iP011600	TR.PAIR	2SA1358/C3421 O,Y	
⚠	Q713	iC224030	TR	2SC2240 GR,BL	
⚠	Q715	VN996900	TR	2SC4495	
⚠	Q716	VY760300	TR.PAIR	2SA1492/C3856 OPY	
⚠	Q718	VY760300	TR.PAIR	2SA1492/C3856 OPY	
⚠	Q720	VP883100	TR	2SC1890A D,E	
⚠	Q721	VP883100	TR	2SC1890A D,E	
⚠	Q722	VC141900	TR	2SB941 P,Q	
	Q723	iC1815I0	TR	2SC1815 Y	
	Q726	VK432900	TR	2SD1915F S,T	
	R508	HV756560	R.CAR.FP	5.6KΩ 1/4W	
	R517	HV756100	R.CAR.FP	1KΩ 1/4W	
	R553	VP941600	R.MTL.OXD	5.6KΩ 1W	
	R554	VP941600	R.MTL.OXD	5.6KΩ 1W	
⚠	R555	HV756270	R.CAR.FP	2.7KΩ 1/4W	
⚠	R557	HV755820	R.CAR.FP	820Ω 1/4W	
⚠	R558	VK189000	R.FUS	1KΩ 1/4W	
⚠	R559	HV754470	R.CAR.FP	47Ω 1/4W	
	R560	VP939800	R.MTL.OXD	10Ω 1W	
	R561	VP941600	R.MTL.OXD	5.6KΩ 1W	
	R562	VP941600	R.MTL.OXD	5.6KΩ 1W	
⚠	R563	HV756270	R.CAR.FP	2.7KΩ 1/4W	
⚠	R565	HV755820	R.CAR.FP	820Ω 1/4W	
⚠	R566	VK189000	R.FUS	1KΩ 1/4W	
⚠	R567	HV754470	R.CAR.FP	47Ω 1/4W	
	R568	VP941600	R.MTL.OXD	5.6KΩ 1W	
	R569	VP941600	R.MTL.OXD	5.6KΩ 1W	
⚠	R570	HV756270	R.CAR.FP	2.7KΩ 1/4W	
⚠	R572	HV755820	R.CAR.FP	820Ω 1/4W	
⚠	R573	VK189000	R.FUS	1KΩ 1/4W	
⚠	R574	HV754470	R.CAR.FP	47Ω 1/4W	
⚠	R580	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R581	VK188400	R.FUS	330Ω 1/4W	
	R583	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R584	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R585	VK188400	R.FUS	330Ω 1/4W	
⚠	R587	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R588	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R589	VK188400	R.FUS	330Ω 1/4W	
⚠	R591	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R598	VP939800	R.MTL.OXD	10Ω 1W	
⚠	R603	VP939800	R.MTL.OXD	10Ω 1W	
⚠	R609	VP939800	R.MTL.OXD	10Ω 1W	
	R611	HV754100	R.CAR.FP	10Ω 1/4W	
	R613	HV754100	R.CAR.FP	10Ω 1/4W	
	R614	VP944500	R.MTL.OXD	390Ω 1W	
	R615	VP944500	R.MTL.OXD	390Ω 1W	
⚠ ❋	R628	V3872900	R.WW	0.22Ω 3W	
⚠ ❋	R629	V3872900	R.WW	0.22Ω 3W	
⚠ ❋	R630	V3872900	R.WW	0.22Ω 3W	
⚠ ❋	R631	V3872900	R.WW	0.22Ω 3W	
⚠ ❋	R637	V3872900	R.WW	0.22Ω 3W	
⚠ ❋	R638	V3872900	R.WW	0.22Ω 3W	

❋ New Parts

	Schm Ref.	PART NO.	Description		
	R713	HV753220	R.CAR.FP	2.2Ω 1/4W	
	R724	HV753220	R.CAR.FP	2.2Ω 1/4W	
	R737	HV753220	R.CAR.FP	2.2Ω 1/4W	
⚠	R738	VP944500	R.MTL.OXD	390Ω 1W	
	R739	VP941600	R.MTL.OXD	5.6KΩ 1W	
	R740	VP941600	R.MTL.OXD	5.6KΩ 1W	
⚠	R741	HV756270	R.CAR.FP	2.7KΩ 1/4W	
⚠	R742	VK188400	R.FUS	330Ω 1/4W	
⚠	R744	HV755820	R.CAR.FP	820Ω 1/4W	
⚠	R745	VK189000	R.FUS	1KΩ 1/4W	
⚠	R746	HV754470	R.CAR.FP	47Ω 1/4W	
⚠	R747	VP939800	R.MTL.OXD	10Ω 1W	
⚠	R748	HV754470	R.CAR.FP	47Ω 1/4W	
⚠	R749	VK189000	R.FUS	1KΩ 1/4W	
⚠	R751	HV755820	R.CAR.FP	820Ω 1/4W	
⚠	R752	VK188400	R.FUS	330Ω 1/4W	
⚠	R753	HV756270	R.CAR.FP	2.7KΩ 1/4W	
	R754	VP941600	R.MTL.OXD	5.6KΩ 1W	
	R755	VP941600	R.MTL.OXD	5.6KΩ 1W	
⚠	R756	VP944500	R.MTL.OXD	390Ω 1W	
⚠	R759	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R761	VZ123100	R.MTL.PLAT	0.22Ω 3W	
⚠	R762	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R763	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R764	VZ123100	R.MTL.PLAT	0.22Ω 3W	
⚠	R766	HV753470	R.CAR.FP	4.7Ω 1/4W	
⚠	R772	VP939800	R.MTL.OXD	10Ω 1W	
⚠	R773	VP939800	R.MTL.OXD	10Ω 1W	
	R781	VP939800	R.MTL.OXD	10Ω 1W	
⚠	R808	HV753100	R.CAR.FP	1Ω 1/4W	
⚠	R809	HV753100	R.CAR.FP	1Ω 1/4W	
⚠	R812	VZ123100	R.MTL.PLAT	0.22Ω 3W	
⚠	R813	VZ123100	R.MTL.PLAT	0.22Ω 3W	
⚠	RY501	VK438300	RELAY	DH24D2-OT/M2	
	SW501	VV523900	SW.PUSH	PBS-YM-001	
⚠	SW705	VZ361100	SW.SLIDE	SL13B022AMC1(UCRT)	
	TE501	VC313700	TERM.SP	8P(UCRTA)	
	TE501	VK506200	TERM.SP	8P(BGL)	
		VJ828000	PIN	IMSA-6024-03E	
		BB071360	SCR.TERM	8.3x13	
		EP600140	SCR.BND.HD	3x10 MFZN2-BL	
		V2518600	P.C.B.	TUNER/TU-01(UC)	
		V2518700	P.C.B.	TUNER/TU-01(RT)	
		V2518800	P.C.B.	TUNER/TU-01(ABGL)	
		V2518900	P.C.B.	TUNER/TU-01RDS(BG)	
	CB4	VQ961900	CN	16P	
	C1	VG287600	C.EL	100uF 25V	
	C3	VG275800	C.CE.TUBLR	8.2pF 50V	
	C4	UR837470	C.EL	47uF 16V	
	C5	VF467300	C.CE.TUBLR	0.01uF 16V	

❋ New Parts

P.C.B. TUNER & TUNER/SMD

Schm Ref.	PART NO.	Description		
C6	UR837470	C.EL	47uF	16V
C7	UM416100	C.EL	1uF	50V
C8	VF467300	C.CE.TUBLR	0.01uF	16V
C9	VF467300	C.CE.TUBLR	0.01uF	16V
C10	VF467300	C.CE.TUBLR	0.01uF	16V
C11	VF467000	C.CE.TUBLR	1000pF	50V
C12	UM397100	C.EL	10uF	16V
C13	UM397100	C.EL	10uF	16V
C14	FG652100	C.CE	100pF	50V
C15	VF467000	C.CE.TUBLR	1000pF	50V
C16	VF466700	C.CE.TUBLR	47pF	50V
C17	UR837470	C.EL	47uF	16V
C19	V4006100	C.CE	10pF	50V
C20	VG287600	C.EL	100uF	25V
C21	VJ599000	C.CE.TUBLR	0.047uF	16V
C22	VG290700	C.EL	3.3uF	50V
C23	VF467300	C.CE.TUBLR	0.01uF	16V
C24	UM406470	C.EL	4.7uF	50V
C25	UM416330	C.EL	3.3uF	50V
C26	UM397100	C.EL	10uF	16V
C27	VF467300	C.CE.TUBLR	0.01uF	16V
C28	VA760600	C.CE	10pF	50V
C29	UM416100	C.EL	1uF	50V
C30	UM416100	C.EL	1uF	50V
C31	VG287600	C.EL	100uF	25V
C32	UM415470	C.EL	0.47uF	50V
C33	UM416100	C.EL	1uF	50V
C34	UA954470	C.MYLAR	0.047uF	50V
C35	VG290700	C.EL	3.3uF	50V
C36	UA952270	C.MYLAR	270pF	50V(ABGL)
C36	UA953100	C.MYLAR	1000pF	50V(UCRT)
C37	UA952270	C.MYLAR	270pF	50V(ABGL)
C37	UA953100	C.MYLAR	1000pF	50V(UCRT)
C38	VF466900	C.CE.TUBLR	470pF	50V
C39	VG287200	C.EL	10uF	50V
C40	VG290700	C.EL	3.3uF	50V
C41	UA953390	C.MYLAR	3900pF	50V
C42	UM397220	C.EL	22uF	25V
C43	UA953390	C.MYLAR	3900pF	50V
C44	VG290700	C.EL	3.3uF	50V
C45	UR837470	C.EL	47uF	16V
C46	UR837470	C.EL	47uF	16V
C47	VG278600	C.CE.TUBLR	330pF	50V
C48	VG278800	C.CE.TUBLR	560pF	50V
C49	UA952120	C.MYLAR	120pF	50V(ABGL)
C49	UA953220	C.MYLAR	2200pF	50V(UCRT)
C50	VJ599000	C.CE.TUBLR	0.047uF	16V
C51	UR837470	C.EL	47uF	16V
C52	UR837470	C.EL	47uF	16V
C53	UR837470	C.EL	47uF	16V
C54	VA761100	C.CE	27pF	50V
C55	VA761100	C.CE	27pF	50V
C56	VJ599000	C.CE.TUBLR	0.047uF	16V

❋ New Parts

Schm Ref.	PART NO.	Description	
C57	VG278600	C.CE.TUBLR	330pF 50V
D1	VD631600	DIODE	1SS133,176,HSS104
D2	VD631600	DIODE	1SS133,176,HSS104
D3	VG437700	DIODE.ZENR	MTZJ5.6B 5.6V
Fi1	GG000560	FLTR.CE	SFE10.7MS3GHY-A
Fi2	GG000560	FLTR.CE	SFE10.7MS3GHY-A
Fi3	VC219000	FLTR.CE	SFZ450JL3
IC1	XB760A00	IC	LA1266
IC2	XQ944A00	IC	LC72131
IC3	iG158100	IC	LA3401
IC4	XU664A00	IC	LC72720N
L1	Vi546100	COIL	220uH
L2	Vi546100	COIL	220uH
L3	Vi546100	COIL	220uH
L4	Vi546100	COIL	220uH
L5	Vi546100	COIL	220uH
PK1	V2716700	TUNER.PK	ENV-172A4G1(ABGL)
PK1	V2909100	TUNER.PK	ENV-172C8G1R(UCRT)
PK2	VU333700	COIL.RF.AM	940536051A
Q1	iC053540	TR	2SC535 A,B,C
Q2	iC053540	TR	2SC535 A,B,C
Q3	VD678500	TR.DGT	DTA114ES
Q4	iC174020	TR	2SC1740S R,S
Q5	VG722000	TR.DGT	DTC144ES
Q6	iC1815I0	TR	2SC1815 Y
Q7	VD678500	TR.DGT	DTA114ES
R56	HV754470	R.CAR.FP	47Ω 1/4W
SW1	VS602600	SW.SLIDE	SS070-P022 A(RT)
T1	VC218600	COIL.DT.FM	10.7MHz
T2	VR895700	COIL.IF	450KHz
T3	VT486800	COIL	XYA2
T4	VQ138200	FLTR.LC	19KHz
T5	VQ138200	FLTR.LC	19KHz
TE1	VU477800	TERM.ANT	AJ-2038-040
TP1	VT969000	PIN.TEST	IRS-2049
TP2	VT969000	PIN.TEST	IRS-2049
VR1	VJ694000	VR.TRIM	B47KΩ
VR2	VJ694000	VR.TRIM	B47KΩ
XL1	VY734600	RSNR.CRYS	7.2MHz
XL2	GG000750	RSNR.CE	18.95KHz
XL3	V3930900	RSNR.CRYS	4.332MHz HC-49U
	BB071360	SCR.TERM	8.3x13
	VR282500	PLATE	ANT.
❋	V2519300	P.C.B.CHP	TUNER/TU-01(UC)
❋	V2519400	P.C.B.CHP	TUNER/TU-01(RT)
❋	V2519500	P.C.B.CHP	TUNER/TU-01(ABGL)
❋	V2519600	P.C.B.CHP	TUNER/TU-01RDS(BG)
C1	VG287600	C.EL	100uF 25V
C3	UB050800	C.CE.M.CHP	8pF 50V
C4	UR837470	C.EL	47uF 16V

❋ New Parts

P.C.B. TUNER/SMD

Schm Ref.	PART NO.	Description		
C5	UB044100	C.CE.M.CHP	0.01uF	50V
C6	UR837470	C.EL	47uF	16V
C7	UM416100	C.EL	1uF	50V
C8	UB044100	C.CE.M.CHP	0.01uF	50V
C9	UB044100	C.CE.M.CHP	0.01uF	50V
C10	UB044100	C.CE.M.CHP	0.01uF	50V
C11	UB013100	C.CE.M.CHP	1000pF	50V
C12	UM397100	C.EL	10uF	16V
C13	UM397100	C.EL	10uF	16V
C14	FG652100	C.CE	100pF	50V
C15	UB013100	C.CE.M.CHP	1000pF	50V
C16	UB051470	C.CE.M.CHP	47pF	50V
C17	UR837470	C.EL	47uF	16V
C19	V4006100	C.CE	10pF	50V
C20	VG287600	C.EL	100uF	25V
C21	UB044470	C.CE.M.CHP	0.047uF	50V
C22	VG290700	C.EL	3.3uF	50V
C23	UB044100	C.CE.M.CHP	0.01uF	50V
C24	UM406470	C.EL	4.7uF	50V
C25	UM416330	C.EL	3.3uF	50V
C26	UM397100	C.EL	10uF	16V
C27	UB044100	C.CE.M.CHP	0.01uF	50V
C28	VA760600	C.CE	10pF	50V
C29	UM416100	C.EL	1uF	50V
C30	UM416100	C.EL	1uF	50V
C31	VG287600	C.EL	100uF	25V
C32	UM415470	C.EL	0.47uF	50V
C33	UM416100	C.EL	1uF	50V
C34	UA954470	C.MYLAR	0.047uF	50V
C35	VG290700	C.EL	3.3uF	50V
C36	UA952270	C.MYLAR	270pF	50V(ABGL)
C36	UA953100	C.MYLAR	1000pF	50V(UCRT)
C37	UA952270	C.MYLAR	270pF	50V(ABGL)
C37	UA953100	C.MYLAR	1000pF	50V(UCRT)
C38	UB012470	C.CE.M.CHP	470pF	50V
C39	VG287200	C.EL	10uF	50V
C40	VG290700	C.EL	3.3uF	50V
C41	UA953390	C.MYLAR	3900pF	50V
C42	UM397220	C.EL	22uF	25V
C43	UA953390	C.MYLAR	3900pF	50V
C44	VG290700	C.EL	3.3uF	50V
C45	UR837470	C.EL	47uF	16V
C46	UR837470	C.EL	47uF	16V
C47	UB012330	C.CE.M.CHP	330pF	50V
C48	UB012560	C.CE.M.CHP	560pF	50V
C49	UA952120	C.MYLAR	120pF	50V(ABGL)
C49	UA953220	C.MYLAR	2200pF	50V(UCRT)
C50	UB044470	C.CE.M.CHP	0.047uF	50V
C51	UR837470	C.EL	47uF	16V
C52	UR837470	C.EL	47uF	16V
C53	UR837470	C.EL	47uF	16V
C54	VA761100	C.CE	27pF	50V
C55	VA761100	C.CE	27pF	50V

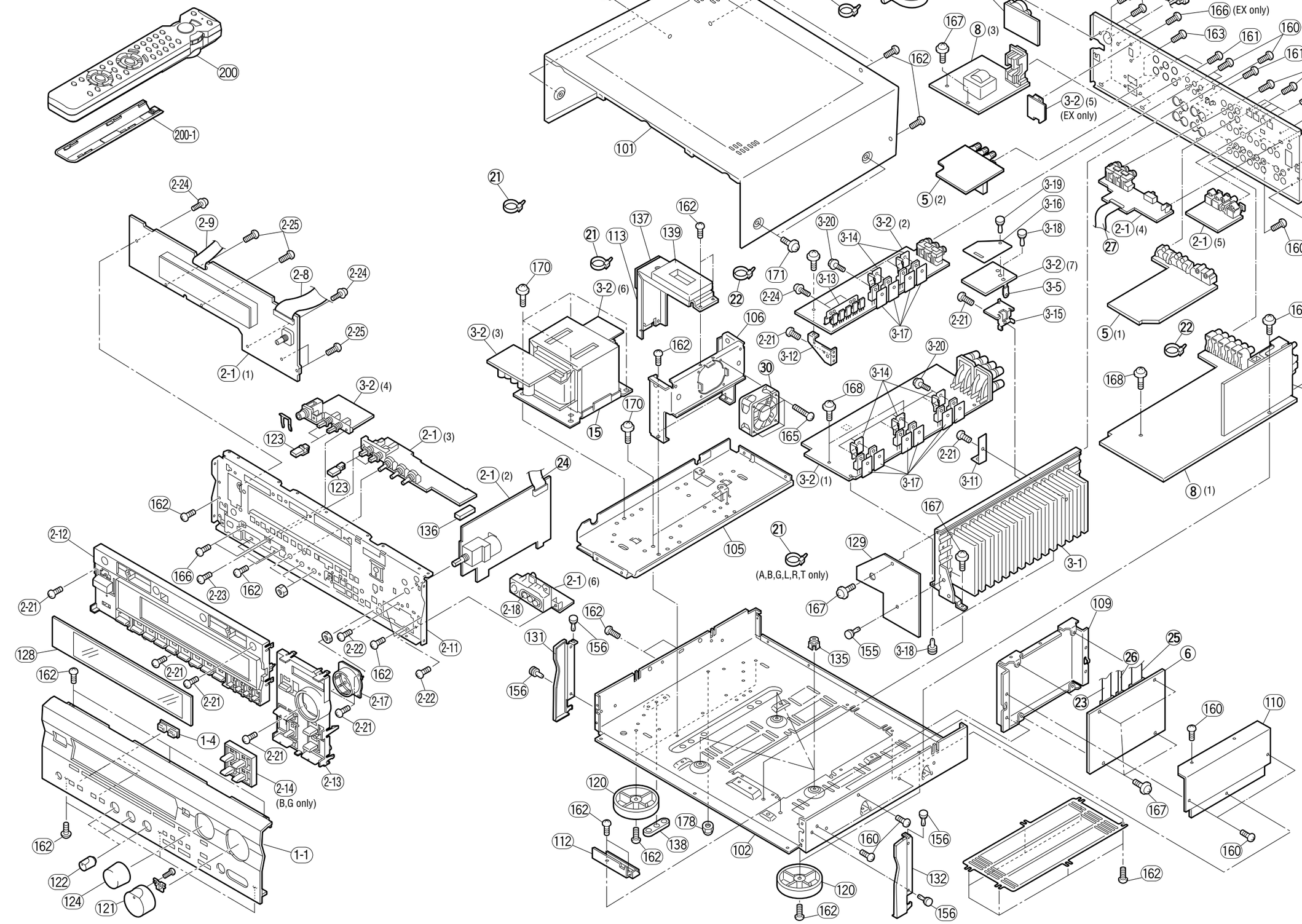
Schm Ref.	PART NO.	Description	
C56	UB044470	C.CE.M.CHP	0.047uF50V
C57	UB012330	C.CE.M.CHP	330pF 50V
CB4	VQ961900	CN	16P
D1	VT332900	DIODE	1SS355
D2	VT332900	DIODE	1SS355
D3	VU172000	DIODE.ZENR	UDZS5.6BTE-17 5.6V
Fi1	GG000560	FLTR.CE	SFE10.7MS3GHY-A
Fi2	GG000560	FLTR.CE	SFE10.7MS3GHY-A
Fi3	VC219000	FLTR.CE	SFZ450JL3
IC1	XB760A00	IC	LA1266
IC2	XQ944A00	IC	LC72131
IC3	iG158100	IC	LA3401
IC4	XU664A00	IC	LC72720N(BG)
L1	VU889500	COIL	220uH
L2	VU889500	COIL	220uH
L3	VU889500	COIL	220uH
L4	VU889500	COIL	220uH
L5	VU889500	COIL	220uH
PK1	V2716700	TUNER.PK	ENV-172A4G1(ABGL)
PK1	V2909100	TUNER.PK	ENV-172C8G1R(UCRT)
PK2	VU333700	COIL.RF.AM	940536051A
Q1	iC053540	TR	2SC535 A,B,C
Q2	iC053540	TR	2SC535 A,B,C
Q3	VD678500	TR.DGT	DTA114ES
Q4	iC174020	TR	2SC1740S R,S
Q5	VG722000	TR.DGT	DTC144ES
Q6	iC1815I0	TR	2SC1815 Y
Q7	VD678500	TR.DGT	DTA114ES
R56	HV754470	R.CAR.FP	47Ω 1/4W
SW1	VS602600	SW.SLIDE	SS070-P022 A(RT)
T1	VC218600	COIL.DT.FM	10.7MHz
T2	VR895700	COIL.IF	450KHz
T3	VT486800	COIL	XYA2(ABGL)
T4	VQ138200	FLTR.LC	19KHz
T5	VQ138200	FLTR.LC	19KHz
TE1	VU477800	TERM.ANT	AJ-2038-040
TP1	VT969000	PIN.TEST	IRS-2049
TP2	VT969000	PIN.TEST	IRS-2049
VR1	VJ694000	VR.TRIM	B47KΩ
VR2	VJ694000	VR.TRIM	B47KΩ
XL1	VY734600	RSNR.CRYS	7.2MHz
XL2	GG000750	RSNR.CE	18.95KHz
XL3	V3930900	RSNR.CRYS	4.332MHz
	BB071360	SCR.TERM	8.3x13
	VR282500	PLATE	ANT.

■ Chip Resistor

Schm Ref.	PART NO.	Description		
	RD250000	R.CAR.CHP	0Ω	1/10W
	RD253220	R.CAR.CHP	2.2Ω	1/10W
	RD254470	R.CAR.CHP	47Ω	1/10W
	RD254820	R.CAR.CHP	82Ω	1/10W
	RD255100	R.CAR.CHP	100Ω	1/10W
	RD255220	R.CAR.CHP	220Ω	1/10W
	RD255330	R.CAR.CHP	330Ω	1/10W
	RD255470	R.CAR.CHP	470Ω	1/10W
	RD255680	R.CAR.CHP	680Ω	1/10W
	RD255820	R.CAR.CHP	820Ω	1/10W
	RD256100	R.CAR.CHP	1KΩ	1/10W
	RD256110	R.CAR.CHP	1.1KΩ	1/10W
	RD256120	R.CAR.CHP	1.2KΩ	1/10W
	RD256130	R.CAR.CHP	1.3KΩ	1/10W
	RD256150	R.CAR.CHP	1.5KΩ	1/10W
	RD256180	R.CAR.CHP	1.8KΩ	1/10W
	RD256220	R.CAR.CHP	2.2KΩ	1/10W
	RD256270	R.CAR.CHP	2.7KΩ	1/10W
	RD256330	R.CAR.CHP	3.3KΩ	1/10W
	RD256470	R.CAR.CHP	4.7KΩ	1/10W
	RD256510	R.CAR.CHP	5.1KΩ	1/10W
	RD256560	R.CAR.CHP	5.6KΩ	1/10W
	RD256680	R.CAR.CHP	6.8KΩ	1/10W
	RD256820	R.CAR.CHP	8.2KΩ	1/10W
	RD257100	R.CAR.CHP	10KΩ	1/10W
	RD257110	R.CAR.CHP	11KΩ	1/10W
	RD257120	R.CAR.CHP	12KΩ	1/10W
	RD257150	R.CAR.CHP	15KΩ	1/10W
	RD257180	R.CAR.CHP	18KΩ	1/10W
	RD257220	R.CAR.CHP	22KΩ	1/10W
	RD257330	R.CAR.CHP	33KΩ	1/10W
	RD257360	R.CAR.CHP	36KΩ	1/10W
	RD257470	R.CAR.CHP	47KΩ	1/10W
	RD257510	R.CAR.CHP	51KΩ	1/10W
	RD257560	R.CAR.CHP	56KΩ	1/10W
	RD257620	R.CAR.CHP	62KΩ	1/10W
	RD257820	R.CAR.CHP	82KΩ	1/10W
	RD258100	R.CAR.CHP	100KΩ	1/10W
	RD258330	R.CAR.CHP	330KΩ	1/10W
	RD258470	R.CAR.CHP	470KΩ	1/10W
	RD259100	R.CAR.CHP	1MΩ	1/10W
	RD556100	R.CAR.CHP	1KΩ	1/10W
	RD556300	R.CAR.CHP	3KΩ	1/10W
	RD556330	R.CAR.CHP	3.3KΩ	1/10W
	RD556390	R.CAR.CHP	3.9KΩ	1/10W
	RD557100	R.CAR.CHP	10KΩ	1/10W
	RD557120	R.CAR.CHP	12KΩ	1/10W

❋ New Parts

■ EXPLODED VIEW



■ MECHANICAL PARTS

	Ref. No.	PART NO.	Description		Remarks	Markets
✵	1- 1	V3827200	FRONT PANEL		RX-V795aBL	
✵	1- 1	V3827300	FRONT PANEL		RX-V795aGD	
✵	1- 1	V3827400	FRONT PANEL		RX-V795aRDS BL	
✵	1- 1	V3827500	FRONT PANEL		RX-V795aRDS TI	
✵	1- 1	V3827600	FRONT PANEL		HTR-5170GP	
	1- 4	V2468600	ESCUTCHOEN	3/8		
	2- 1	V3013900	P.C.B. ASS'Y	OPERATION		(L)
	2- 1	V3014000	P.C.B. ASS'Y	OPERATION		(UCA)
	2- 1	V3014100	P.C.B. ASS'Y	OPERATION		(RT)
	2- 1	V3014300	P.C.B. ASS'Y	OPERATION		(BG)
	2- 8	MF227160	S FLEXIBLE FLAT CABLE	27P 160mm		
	2- 9	MF207200	S FLEXIBLE FLAT CABLE	7P 200mm		
	2-11	V2460700	SUB CHASSIS			
	2-12	V2465500	BUTTON CASE		BL	
	2-12	V2465600	BUTTON CASE		TI	
	2-12	V2465700	BUTTON CASE		GD	
	2-12	V2633800	BUTTON CASE		GP	
	2-13	V2465800	BUTTON INPUT		BL	
	2-13	V2465900	BUTTON INPUT		TI	
	2-13	V2466000	BUTTON INPUT		GD	
	2-14	V2467000	BUTTON, RDS		BL	
	2-14	V2467100	BUTTON, RDS		TI	
	2-17	V2467900	ESCUTCHEON, VOL		BL	
	2-17	V2468000	ESCUTCHEON, VOL		TI	
	2-17	V2468100	ESCUTCHEON, VOL		GD	
	2-17	V2468200	ESCUTCHEON, VOL		GP	
	2-18	V2468300	ESCUTCHEON, PJ		BL	
	2-18	V2468400	ESCUTCHEON, PJ		TI	
	2-18	V2468500	ESCUTCHEON, PJ		GD	
	2-21	EP600830	BIND HEAD B-TITE SCREW	3x8 FCRM3-BL		
	2-22	VN413300	BIND HEAD BONDING B-T. SCREW	3x8 MFZN2-BL		
	2-23	EG330030	BIND HEAD SCREW	3x6 FCRM3-BL		
	2-24	VT669300	PW HEAD B-TITE SCREW	3x8-8 MFC2		
	2-25	EP630220	BIND HEAD P-TITE SCREW	3x8 ZMC2-BL		
	3- 1	V2564700	HEAT SINK			
✵	3- 2	V4108400	P.C.B. ASS'Y	MAIN		(UCRT)
✵	3- 2	V4108500	P.C.B. ASS'Y	MAIN		(A)
✵	3- 2	V4108600	P.C.B. ASS'Y	MAIN		(BGL)
⚠	3- 5	VM842300	THERMISTOR	PTH9M04 BF/80_C		
	3-11	VV518700	SUPPORT, HEAT SINK	L		
	3-12	V2564600	FRAME	PCB		
	3-13	V2461000	SUPPORT, TR			
	3-14	V2564500	SUPPORT, TR			
	3-15	V2195400	SUPPORT, PS			
	3-16	V3122200	SHEET	PS795		
	3-17	VV849300	SHEET	19x24		
	3-18	VQ368500	PUSH RIVET	P3545-B		
	3-19	VQ368600	PUSH RIVET	P3555-B		
	3-20	VK173200	SCREW, TRANSISTOR	3x15 SP FCM3		
✵	5	V4120000	P.C.B. ASS'Y	VIDEO		(UCRT)
✵	5	V4120100	P.C.B. ASS'Y	VIDEO		(A)
✵	5	V4120200	P.C.B. ASS'Y	VIDEO		(BGL)
	6	V3005800	P.C.B. ASS'Y	DSP		

✵ New Parts

	Ref. No.	PART NO.	Description		Remarks	Markets
	7	V2518600	P.C.B. ASS'Y	TUNER/TU-01		(UC)
	7	V2518700	P.C.B. ASS'Y	TUNER/TU-01		(RT)
	7	V2518800	P.C.B. ASS'Y	TUNER/TU-01		(AL)
	7	V2518900	P.C.B. ASS'Y	TUNER/TU-01RDS		(BG)
❋	8	V4221600	P.C.B. ASS'Y	INPUT		(UC)
❋	8	V4221700	P.C.B. ASS'Y	INPUT		(RT)
❋	8	V4221800	P.C.B. ASS'Y	INPUT		(A)
❋	8	V4221900	P.C.B. ASS'Y	INPUT		(B)
❋	8	V4222000	P.C.B. ASS'Y	INPUT		(G)
❋	8	V4222100	P.C.B. ASS'Y	INPUT		(L)
⚠	15	XV461A00	POWER TRANSFORMER			(U)
⚠	15	XV462A00	POWER TRANSFORMER			(C)
⚠	15	XV463A00	POWER TRANSFORMER			(RT)
⚠	15	XV464A00	POWER TRANSFORMER			(A)
⚠	15	XV465A00	POWER TRANSFORMER			(BGL)
⚠	16	V2296800	POWER CORD ASS'Y			(A)
⚠	16	V2363800	POWER CORD ASS'Y			(UC)
⚠	16	VN363700	POWER CORD ASS'Y			(GL)
⚠	16	VV437300	POWER CORD ASS'Y			(B)
⚠	16	VZ542500	POWER CORD ASS'Y			(RT)
	17	V2438700	CORD STOPPER	10P1		
	21	VU590000	BINDING TIE	CBTD001B		
	22	VZ625600	BINDING TIE	SE140 L=140		
	23	MF211140	S FLEXIBLE FLAT CABLE	11P 140mm		
	24	MF118140	FLEXIBLE FLAT CABLE	18P 140mm		
	25	MF113140	FLEXIBLE FLAT CABLE	13P 140mm		
	26	MF106250	FLEXIBLE FLAT CABLE	6P 250mm		
	27	MF215200	S FLEXIBLE FLAT CABLE	15P 200mm		
	30	VV272500	DC FAN MOTOR	2410ML-05W-B20-L00		
	101	VV121300	TOP COVER		BL	
	101	VV121500	TOP COVER		TI	
	101	VZ884500	TOP COVER		GD	
	102	VY758300	CHASSIS			
❋	103	V3986000	REAR PANEL		RX-V795a	(U)
❋	103	V3986100	REAR PANEL		RX-V795a	(C)
❋	103	V3986200	REAR PANEL		RX-V795a	(T)
❋	103	V3986300	REAR PANEL		RX-V795a	(A)
❋	103	V3986400	REAR PANEL		RX-V795a	(L)
❋	103	V3986500	REAR PANEL		RX-V795aRDS	(B)
❋	103	V3986600	REAR PANEL		RX-V795aRDS	(G)
❋	103	V3986700	REAR PANEL		HTR-5170	(U)
❋	103	V3986800	REAR PANEL		HTR-5170	(C)
❋	103	V3986900	REAR PANEL		HTR-5170	(T)
❋	103	V3987000	REAR PANEL		HTR-5170	(A)
	105	VV123100	FRAME, TRANS			
	106	VZ332900	FRAME, FAN			
	109	V2461100	SHIELD CASE			
	110	VZ332800	SHIELD CASE COVER			
	112	VZ333000	SUPPORT, PCB			
	113	VZ333100	SUPPORT, TRANS.			
	120	V0042500	LEG	D60xH21	GD	
	120	VS025000	LEG	D60xH21	RX-V795a BL/TI	
	120	VV544300	LEG	D60xH21	HTR-5170	

❋ New Parts

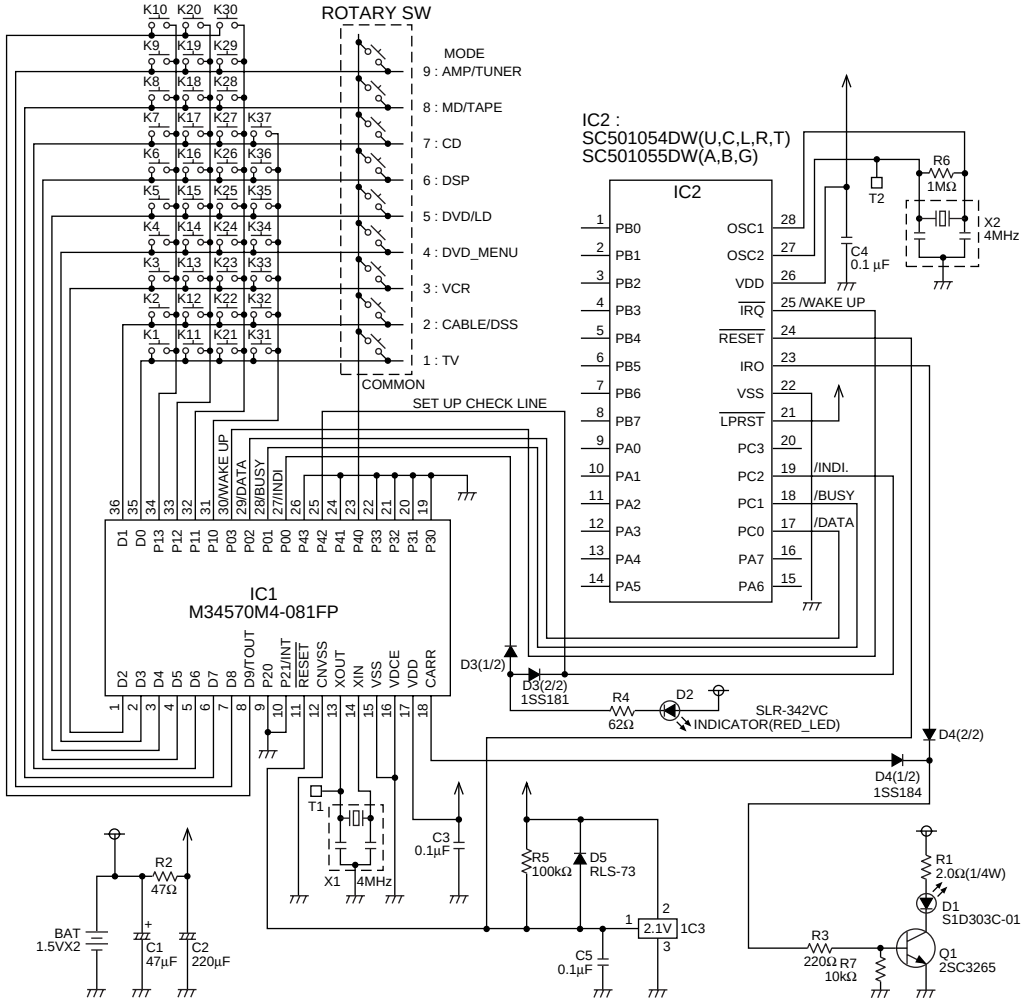
Ref. No.	PART NO.	Description		Remarks	Markets
121	V2566600	KNOB, LED		BL	
121	V2566700	KNOB, LED		TI	
121	V2566800	KNOB, LED		GD	
122	V0016700	KNOB		GD	
122	VV311000	KNOB	D14	BL	
122	VV311400	KNOB	D14	TI	
123	V2467300	BUTTON	3/8	BL	
123	V2467400	BUTTON	3/8	TI	
123	V2467500	BUTTON	3/8	GD	
124	V2467600	KNOB, ENC	D30	BL	
124	V2467700	KNOB, ENC	D30	TI	
124	V2467800	KNOB, ENC	D30	GD	
128	V2469400	SHEET, WINDOW			
129	VZ531600	SHHET			
131	V2468800	PLATE SIDE L	130	BL	
131	V2468900	PLATE SIDE L	130	TI	
131	V2469000	PLATE SIDE L	130	GD	
132	V2469100	PLATE SIDE R	130	BL	
132	V2469200	PLATE SIDE R	130	TI	
132	V2469300	PLATE SIDE R	130	GD	
135	VR264400	SPACER	H8		
136	VZ092400	DAMPER	6x5x10		
137	V3422200	DAMPER			
138	V2064200	DAMPER			
139	VP922800	DAMPER	10x50x80		
155	VQ368500	PUSH RIVET	P3545-B		
156	VQ368600	PUSH RIVET	P3555-B		
160	VN413300	BIND HEAD BONDING B-T. SCREW	3x8 MFZN2-BL		
161	VY731200	BONDING HEAD TAPPING SCREW	3x10 MFNI33		
162	EP600830	BIND HEAD B-TITE SCREW	3x8 FCRM3-BL		
163	EP600250	BIND HEAD B-TITE SCREW	3x8 ZMC2-Y		
165	VV220300	BIND HEAD B-TITE SCREW	3x30 MFZN2-BL		
166	EG330030	BIND HEAD SCREW	3x6 FCRM3-BL		
167	VT669300	PW HEAD B-TITE SCREW	3x8-8 MFC2		
168	VT669400	PW HEAD B-TITE SCREW	3x15-8 MFC2		
170	21991500	PW HEAD S-TITE SCREW	4x8-10 FCRM3-BL		
171	21991500	PW HEAD S-TITE SCREW	4x8-10 FCRM3-BL	BL	
171	VD069600	PW HEAD S-TITE SCREW	4x8-10 MFNI-33	GD	
171	VH313200	BW HEAD S-TITE SCREW	4x8-10 FNM3-BL	TI	
176	AA627310	GROUND TERMINAL			
178	03700480	HEXAGONAL CAP NUT	4.0 MFNI33		
		ACCESSORIES			
200	V2686500	REMOTE CONTROL TRANSMITTER	RRC4000-7003R		(UCRLT)
200	V2686600	REMOTE CONTROL TRANSMITTER	RRC4000-7004R		(ABG)
200-1	XX702560	LID	SMKSI	103RRC-140-01R	
	VQ147100	ANTENNA, FM	1.4m		
	VR248500	ANTENNA, AM LOOP	1.0m		
	VE364900	ANTENNA ADAPTER	PAL 75-300Ω		(B)
	VT948000	ANTENNA ADAPTER			(UC)
		BATTERY, MANGANESE	SUM-3,AA,R06		

❋ New Parts

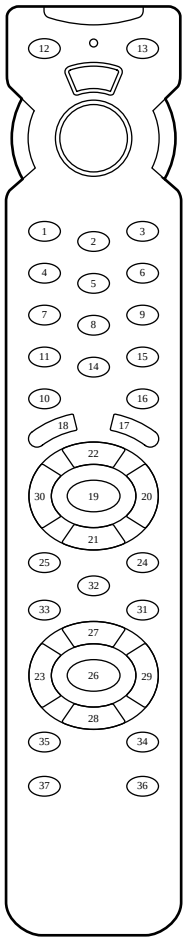
RX-V795a/RDS/HTR-5170

REMOTE CONTROL TRANSMITTER

■ SCHEMATIC DIAGRAM



Key arrangement



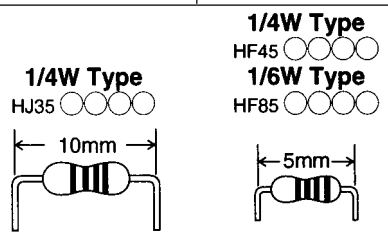
List of the fixed code

Key No.	Key MAME	MODE	TV	Cable/DBS	VCR	DVD Menu	DVD/LD	DSP	CD	Tape/MD	AMP/Tuner
		ID #	0037	2455	3072	– – – –	4545(DVD)	– – – –	6187	8524(Tape)	– – – –
1	1		CH1	CH1	CH1	7C-94	7A-15	7A-88	7A-15		
2	2		CH2	CH2	CH2	7C-95	7A-16	7A-89	7A-16		
3	3		CH3	CH3	CH3	7C-96	7A-18	7A-8A	7A-18		
4	4		CH4	CH4	CH4	7C-97	7A-17	7A-8B	7A-17		
5	5		CH5	CH5	CH5	7C-98	7A-54	7A-8C	7A-54		
6	6		CH6	CH6	CH6	7C-99	7A-0F	7A-8D	7A-0F		
7	7		CH7	CH7	CH7	7C-9A	7A-14	7A-8E	7A-14		
8	8		CH8	CH8	CH8	7C-9B	7A-55	7A-8F	7A-55		
9	9		CH9	CH9	CH9	7C-9C	7A-13	7A-90	7A-13		
10	DSP		Shift of only Ten key in DSP Mode					– – – –	Shift of only Ten key in DSP Mode		
11	0		CH0	CH0	CH0	7C-93	7A-87	7A-91	7A-87		
12	POWER		7A-1D	Power	Power	7A-1D		7A-1D			
13	STANDBY		7A-1E					7A-1E			
14	ENTER		CH Select	CH Select	CH Select	7C-9D	– – – –	7A-12	– – – –	– – – –	7A-12
15	CLEAR		– – – –	+100	– – – –	7C-9F	– – – –	7A-85	– – – –	– – – –	7A-85
16	EFFECT		Surround	7A-56				7A-56			
17	CH+		CH+	CH+	CH+	7C-8B		7A-10	7A-4F	– – – –	7A-10
18	CH–		CH–	CH–	CH–	7C-8A		7A-11	7A-50	– – – –	7A-11
19	MUTE		Mute		7A-1C			7A-1C			
20	VOL+		7A-1A					7A-1A			
21	TV VOL–		TV VOL–					TV VOL–			
22	TV VOL+		TV VOL+					TV VOL+			
23	SKIP–		– – – –	Left	– – – –	7C-B5	7C-B9	7A-53	7A-0B	7A-07	7A-53
24	DISPLAY		Display	Display	Display	7C-9E	7C-A6	7A-C2	79-0B	– – – –	7A-C2
25	SLEEP		Sleep	7A-57				7A-57			
26	PLAY		VCR Play	Menu Select	Play	7C-B8	7C-82	– – – –	7A-08	7A-00	– – – –
27	PAUSE		VCR Pause	Up	Pause	7C-B4	7C-83	7A-98	7A-09	– – – –	7A-98
28	STOP		VCR Stop	Down	Stop	7C-B3	7C-85	7A-99	7A-09	7A-03	7A-99
29	SKIP+		– – – –	Right	– – – –	7C-B6	7C-BA	7A-52	7A-0A	7A-40	7A-52
30	VOL–		7A-1B					7A-1B			
31	TV INPUT		TV Input					– – – –	TV Input	7A-06	– – – –
32	TV POWER		TV Power					TV Power			
33	REC		VCR REC	– – – –	REC	– – – –	– – – –	– – – –	– – – –	7A-04	– – – –
34	FF		VCR FF	Recall	FF	7C-B7	7C-AE	7A-58	7A-0C	7A-02	7A-58
35	REW		VCR REW	– – – –	REW	7C-AC	7C-AB	7A-59	7A-0D	7A-01	7A-59
36	MENU		– – – –	Menu	– – – –	7C-B2	7C-AD	7A-9C	– – – –	– – – –	7A-9C
37	TITLE		– – – –	– – – –	– – – –	7C-B1	7C-AA	7A-86	– – – –	– – – –	7A-86

– – – – : No Code

Parts List for Carbon Resistors

Value	**1/4W** Type Part No.	**1/6W** Type Part No.	Value	**1/4W** Type Part No.	**1/6W** Type Part No.
1.0 Ω	HJ35 3100	HF85 3100	10 kΩ	HF45 7100	HF45 7100
1.8 Ω	HJ35 3180	❊	11 kΩ	HF45 7110	HF45 7110
2.2 Ω	HJ35 3220	HF85 3220	12 kΩ	HJ35 7120	HF85 7120
3.3 Ω	HJ35 3330	HF85 3330	13 kΩ	HF45 7130	HF45 7130
4.7 Ω	HJ35 3470	HF85 3470	15 kΩ	HF45 7150	HF45 7150
5.6 Ω	HJ35 3560	HF85 3560	18 kΩ	HF45 7180	HF45 7180
10 Ω	HF45 4100	HF45 4100	22 kΩ	HF45 7220	HF45 7220
15 Ω	HJ35 4150	HF85 4150	24 kΩ	HF45 7240	HF45 7240
22 Ω	HF45 4220	HF45 4220	27 kΩ	HJ35 7270	HF85 7270
27 Ω	HJ35 4270	HF85 4270	30 kΩ	HF45 7300	HF45 7300
33 Ω	HF45 4330	HF45 4330	33 kΩ	HF45 7330	HF45 7330
39 Ω	HJ35 4390	HF85 4390	36 kΩ	HF45 7360	HF45 7360
47 Ω	HF45 4470	HF45 4470	39 kΩ	HF45 7390	HF45 7390
56 Ω	HF45 4560	HF45 4560	47 kΩ	HF45 7470	HF45 7470
68 Ω	HF45 4680	HF45 4680	51 kΩ	HF45 7510	HF45 7510
75 Ω	HF45 4750	HF45 4750	56 kΩ	HF45 7560	HF45 7560
82 Ω	HF45 4820	HF45 4820	62 kΩ	HF45 7620	HF45 7620
91 Ω	HF45 4910	HF45 4910	68 kΩ	HF45 7680	HF45 7680
100 Ω	HF45 5100	HF45 5100	82 kΩ	HF45 7820	HF45 7820
110 Ω	HJ35 5110	HF85 5110	91 kΩ	HF45 7910	HF45 7910
120 Ω	HF45 5120	HF45 5120	100 kΩ	HF45 8100	HF45 8100
150 Ω	HF45 5150	HF45 5150	110 kΩ	HF45 8110	HF45 8110
160 Ω	HJ35 5160	❊	120 kΩ	HF45 8120	HF45 8120
180 Ω	HF45 5180	HF45 5180	150 kΩ	HF45 8150	HF45 8150
200 Ω	HF45 5200	HF45 5200	180 kΩ	HF45 8180	HF45 8180
220 Ω	HF45 5220	HF45 5220	220 kΩ	HJ35 8220	HF85 8220
270 Ω	HF45 5270	HF45 5270	270 kΩ	HF45 8270	HF45 8270
330 Ω	HF45 5330	HF45 5330	300 kΩ	HF45 8300	HF45 8300
390 Ω	HF45 5390	HF45 5390	330 kΩ	HF45 8330	HF45 8330
430 Ω	HF45 5430	HF45 5430	390 kΩ	HJ35 8390	HF85 8390
470 Ω	HF45 5470	HF45 5470	470 kΩ	HF45 8470	HF45 8470
510 Ω	HF45 5510	HF45 5510	560 kΩ	HJ35 8560	HF85 8560
560 Ω	HF45 5560	HF45 5560	680 kΩ	HJ35 8680	HF85 8680
680 Ω	HF45 5680	HF45 5680	820 kΩ	HJ35 8820	HF85 8820
820 Ω	HF45 5820	HF45 5820	1.0 MΩ	HF45 9100	HF45 9100
910 Ω	HF45 5910	HF45 5910	1.2 MΩ	HJ35 9120	❊
1.0 kΩ	HF45 6100	HF45 6100	1.5 MΩ	HJ35 9150	HF85 9150
1.2 kΩ	HF45 6120	HF45 6120	1.8 MΩ	HJ35 9180	HF85 9180
1.5 kΩ	HF45 6150	HF45 6150	2.2 MΩ	HJ35 9220	HF85 9220
1.8 kΩ	HF45 6180	HF45 6180	3.3 MΩ	HJ35 9330	HF85 9330
2.0 kΩ	HJ35 6200	HF85 6200	3.9 MΩ	HJ35 9390	❊
2.2 kΩ	HF45 6220	HF45 6220	4.7 MΩ	HJ35 9470	HF85 9470
2.4 kΩ	HJ35 6240	HF85 6240			
2.7 kΩ	HF45 6270	HF45 6270			
3.0 kΩ	HF45 6300	HF45 6300			
3.3 kΩ	HF45 6330	HF45 6330			
3.6 kΩ	HJ35 6360	HF85 6360			
3.9 kΩ	HF45 6390	HF45 6390			
4.7 kΩ	HF45 6470	HF45 6470			
5.1 kΩ	HF45 6510	HF45 6510			
5.6 kΩ	HF45 6560	HF45 6560			
6.8 kΩ	HF45 6680	HF45 6680			
8.2 kΩ	HF45 6820	HF45 6820			
9.1 kΩ	HF45 6910	HF45 6910			



❊ : Not available

1992

RX-V795a/RDS
HTR-5170

YAMAHA